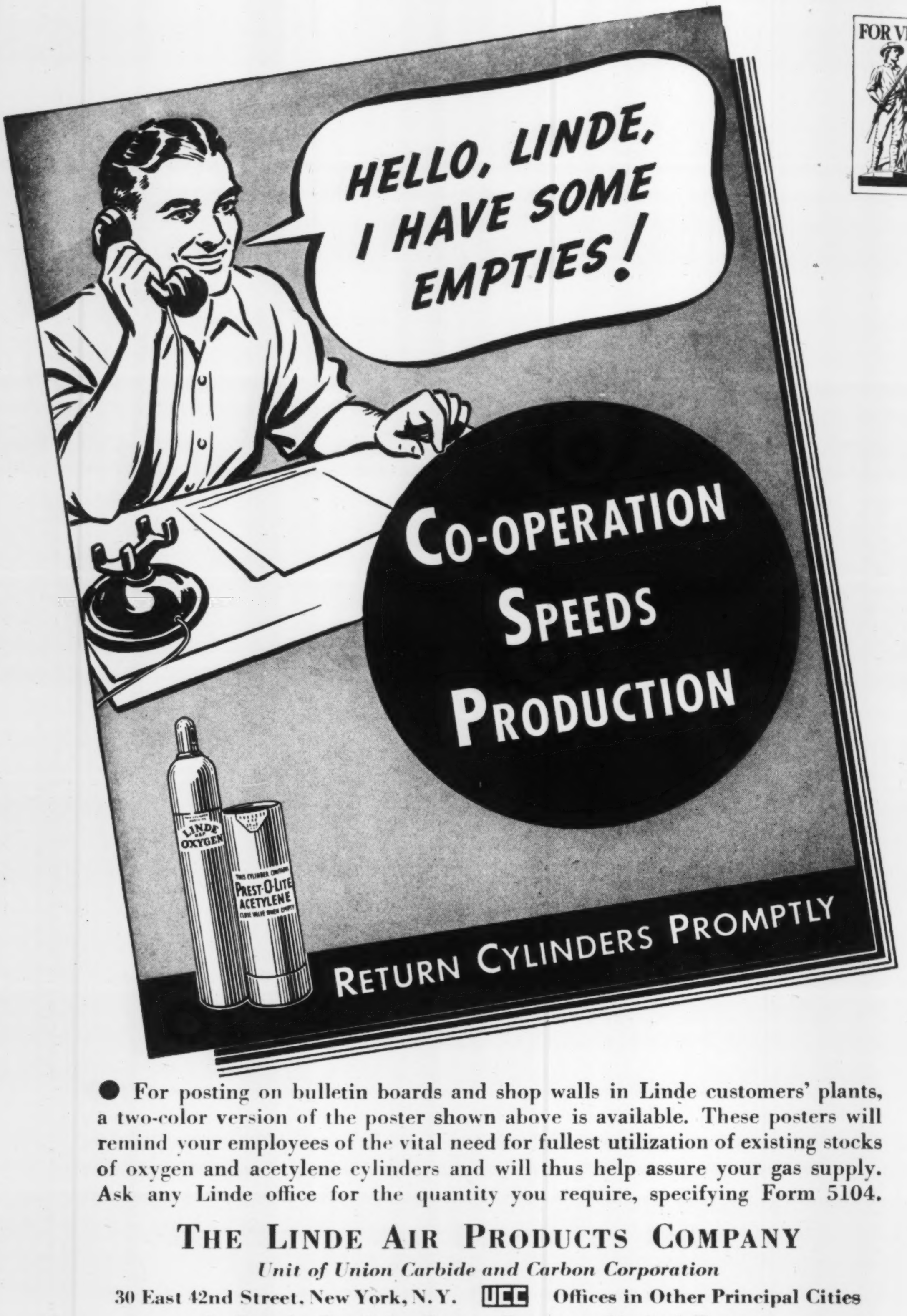
ENGINEERING NEWS-RECORD

Pontoon bridge to aid Washington traffic is inspected by Generals Reybold and Robins.

UNIVERSITY OF MICHIG
GENERAL LIBRARY
ANN ARBOR MICH

FOR VICTORY
BUY
WAR


HELLO, LINDE, I HAVE SOME EMPTIES!
CO-OPERATION SPEEDS PRODUCTION
LINDE OXYGEN
PREST-O-LITE ACETYLENE
RETURN CYLINDERS PROMPTLY

● For posting on bulletin boards and shop walls in Linde customers' plants, a two-color version of the poster shown above is available. These posters will remind your employees of the vital need for fullest utilization of existing stocks of oxygen and acetylene cylinders and will thus help assure your gas supply. Ask any Linde office for the quantity you require, specifying Form 5104.

THE LINDE AIR PRODUCTS COMPANY

Unit of Union Carbide and Carbon Corporation

30 East 42nd Street, New York, N.Y. UCC **Offices in Other Principal Cities**

In Canada: Dominion Oxygen Company, Limited, Toronto

LINDE OXYGEN . . . PREST-O-LITE ACETYLENE . . . UNION CARBIDE
OXWELD, PUROX, PREST-O-WELD APPARATUS . . . OXWELD SUPPLIES

The words "Linde," "Prest-O-Lite," "Union," "Oxweld," "Purox," and "Prest-O-Weld" are trade-marks of Units of Union Carbide and Carbon Corporation.

The Week In Engineering and Construction

ENGINEERING NEWS-RECORD • JULY 9, 1942 • VOLUME 129 • NUMBER 2

OPA construction price order to hold labor at July 1 level

Ceiling on cost of building hangs fire as Price Administration prepares draft of order for probable submission to construction buyers within next week.

The Office of Price Administration has not yet been able to work its way through the tangled job of establishing a price ceiling over construction (*ENR*, June 18, p. 67). At mid-week, however, it was believed that OPA would be ready next week to submit a draft regulation to the federal construction agencies. Speed of progress thereafter will depend on whether the Corps of Engineers, the Federal Works Agency, the Bureau of Yards and Docks, and other construction buyers see eye to eye with OPA.

Best indications this week point to a price ceiling established along the lines forcast in these pages last month. That is, the price of any construction job would be the cost of materials plus labor at the wage rates in effect on some freeze date, plus a percentage established by the OPA.

The labor-cost figure, however, will probably be based on rates in effect as of July 1 rather than on March rates as as originally intended.

Adoption of the July 1 date, now generally agreed upon, would tie in the OPA price ceiling with the wage-freezing program of the Department of Labor, which went into effect last week (*ENR*, May 28, p. 1). This agreement between the U. S. Department of Labor and the AFL Building Trades Department provides that prevailing wage determinations on federal construction under the Bacon-Davis Act will be based on union rates in effect July 1. The AFL agreed not to ask increases above the July 1 rates except with the approval of a new Wage Adjustment Board consisting of labor and construction-agency representatives under the chairmanship of Assistant Secretary of Labor Daniel W. Tracy.

The whole wage -stabilization situation is in constant flux, but if the OPA order is issued soon there will then be three inter-related arrangements to put a brake on construction wage increases: the price ceiling, which would not forbid increases but would make the contractor bear the cost out of his profit; the Labor Department agreement; and the long-standing WPB construction stabilization agreement, which provides that rates will not be increased during the life of any given project.

Among them, these can have considerable effect in slowing the upward movement. But they all admit possibilities of further increases. The WPB agreement, for instance, says that rates on any job shall be based on rates in the entire area from which it draws labor. This tends to move rates in low-wage areas toward those in high-wage areas. Somewhat similarly, WPB has promoted a wage formula used in Detroit (*ENR*, May 14, p. 1) under which wages of all crafts of a given skill are moved upward to those of the most highly paid craft of that skill.

The Labor Department July 1 agreement is, in form at least, considerably more rigid, but it leaves room for the Wage Adjustment Board to approve increases of these same types. It provides for approval of increases in localities where conditions have changed or in the presence of any "abnormal" change of conditions.

Steel pay decision to affect industry

The construction industry this week kept close watch on the National War Labor Relations Board as that body opened hearings on probably its most important case the issue of a pay raise for workers employed by the so-called "Little Steel" group.

The board's decision—expected to be a reflection of White House policy—will not affect the industry immediately, but its indirect effect will be so far-reaching in the field of prices and wages, that it is not thought possible that construction can escape.

The entire structure of price-ceilings, including those on construction materials and equipment, as well as the whole of the Government's attempts to stabilize living conditions, may rest on the decision. That the whole OPA program is at stake was well highlighted last week when opening statements at the board's hearings singled out not the dispute in question but Leon Henderson and his policy.

The dispute centers around the demand by employees of the "Little Steel" group for a substantial raise in pay to compensate for claimed rises in the cost of living and inequalities with pay of other essential war workers.

A WLB panel last week submitted a report which found, among other things, that the steel companies "were in a position" to grant an increase of $1 per day to the workers.

Implications of any decision in favor of any wage rise, in so far as construction is concerned, are many.

First, any rise in labor cost would immediately offer an excuse for raising the price of steel. And any rise permitted in the steel mills will bring with it demands for raises in many other fields affecting the construction industry.

Too, such a decision would release the upward spiral of costs all along the line of the war effort, with consequent increases in prices and cost of living—the exact opposite of the avowed purpose of the OPA program.

Constructors themselves, with contracts made on the basis of existing conditions, would find themselves facing a difficult situation—spiraling labor and materials costs—while forced to operate on a fixed income.

If WLB makes a clear-cut decision on the matter, it may settle once and for all the much-discussed but little acted upon labor policy of the administration.

Ford bucks FPHA housing development in backyard of his Willow Run plant

Truman Committee on War Investigations starts action after Ford authorities put government surveyors and engineers off the site.

A hearing that may have the indirect result of determining the feasibility of operation of the new Ford bomber plant at Willow Run, Mich., will start July 16 before the Truman Committee on War Investigations.

National Housing Authority's whole program of construction of permanent housing wherever possible—to permit sale and recovery of some funds after the war—as well as its whole method of procedure in determining housing needs and supplying those needs, may well come in for a thorough airing during the hearings.

The hearing is an outgrowth of the Ford Motor Co.'s action recently in ejecting Federal Public Housing Authority surveyors from lands owned by the automobile manufacturer. The surveyors, making initial preparations for the proposed construction of several thousand homes for plant workers, had driven hundreds of stakes on the property before they were told to stop work.

Immediately after refusing permission to continue the work Harry Bennett, spokesman, issued a statement in the name of Henry Ford condemning the housing project as "unnecessary, wasteful and extravagant," and saying that construction of such homes was not needed. The statement was addressed to Col. F. Charles Stark, FPHA regional representative at Detroit, and added that Ford was prepared to fight construction of the homes "to the last ditch."

Complicated because of its relation to a very large general home building program for the Detroit-Ypsilanti industrial area, and because of some confusion over the exact number of workers to be accommodated in the area as a whole, the situation is briefly this:

Original estimates as to the number of workers to be employed at Willow Run were set and maintained until a few months ago at 100,000, great majority to come from areas outside the Detroit-Ypsilanti sector. The employment figure was recently cut to 58,000.

To accommodate this influx, NHA prescribed construction of dormitory housing for 10,000 single men, modified dormitories for 4,000 married couples, and estimated that private industry would build single-house units for another 30,000 persons in family groups.

Location of these buildings immediately brought controversy. Labor organizations wanted establishment of a model village near the plant (where no settlement now exists), while civic organizations and others in Detroit and surrounding towns suggested the housing be scattered among the many existing communities in the area, where utilities, schools and other necessary accommodations already exist. Ford and others also suggested that such a town might become a "ghost city" when the war was over, if plant operation is discontinued.

FPHA finally went ahead with plans (as of April 24, 1942) to scatter some of the homes in nearby towns but build several thousand units, plus the dormitories, near the plant site.

The move was dictated by lack of transportation facilities for workers to the war plant from Detroit or other towns except by car or bus.

Authorities of Washtenaw County, site of the bomber plant, also strongly protested the project through George Meader, its prosecuting attorney.

NHA and FPHA officials last week conceded that sending surveyors without first obtaining owner permission may have been an error in finesse, but contended they had not until this time encountered an owner who objected to the procedure.

The whole situation might be changed, anyway, by changes in the general Detroit labor picture. Original FPHA planning was based on the assumption that Detroit's war contracts would attract 200,000 workers of all types exclusive of the Ford employment. However, there is prospect now that this influx might be held forcibly to 75,000.

Ford's objections seem to turn on the expense of building a community complete with all utilities, schools, churches, etc., when the company believes the workers can be cared for elsewhere. It is suggested also that Ford may not care to have in his backyard a community of workers who could easily be organized by unioneers and use the political power of an incorporated governmental entity against him. Another objection might be his known enmity for attempts to curtail activities of rugged individualism.

Although exact nature of Washtenaw County's objections will not be available until the committee hearing is well under way, they may be two-fold—turning on the possibility of a "ghost town" if the bomber plant is abandoned after the war effort is over, and the political implications of a full-fledged new community of new residents.

FPHA and NHA contend, as defense, that operation of the bomber plant might now be impossible if workers' homes are not built near to the plant, and that the type of housing it plans to build (exclusive of the dormitories and apartments) has been accepted and approved everywhere as suitable for workers and even for sale after the war effort has subsided.

Buy WAR BONDS
BASCULE BRIDGE

Chicago public works bureau on parade

In the greatest parade ever held in Chicago, lasting for 15½ hours recently, from 10:00 a.m. to 1:30 a.m. the city department of public works entered 16 floats and scores of other vehicles to depict to the public for the first time visual evidence of the department's activities. All employees of the department also marched in the parade, which included 1,500 floats and 600,000 marchers, staged to show Chicago's contribution to the war effort.

Largest of the city's floats was a ⅛ size working model of a single-leaf bascule bridge, which raised and lowered to the clanging of a real bridge warning bell as it travelled down Michigan Avenue. Several floats entered by the water division showed the plumbing testing laboratory, methods of cutting, calking, and tapping pipe, a sprinkler display containing a water conservation warning, various types of pipe and valves.

ENGINEERING NEWS-RECORD. Published every Thursday. Vol. 129, No. 2. Price 25c per copy. Allow at least ten days for change of address. All communications about subscriptions should be addressed to the Director of Circulation, 330 West 42nd Street, New York, N. Y. Subscriptions, United States, U. S. Possessions and Latin American Republics, $5.00 for one year, $8.00 for two years, $10.00 for three. Canada $5.50 for one year, $9.00 for two years, $11.00 for three years. Great Britain and British possessions 54 shillings for one year, 108 shillings for three years. All other countries $9.00 for one year, $18.00 for three years. Entered as second-class matter October 29, 1936, at the Post Office at Albany, N. Y., under the Act of March 3, 1879. Printed in U. S. A. Cable Address "McGrawhill New York." Member A.B.P. Member A. B. C. Copyright 1942 by McGraw-Hill Publishing Company, Inc., James H. McGraw, Founder and Honorary Chairman; James H. McGraw, Jr., President; Howard Ehrlich, Executive Vice President; Mason Britton, Vice-Chairman; B. R. Putnam, Treasurer; Joseph A. Gerardi, Secretary; J. E. Blackburn, Jr., Circulation Manager. Publication office: 99-129 North Broadway, Albany, N. Y. Editorial and Executive Offices: 330 West 42nd St., New York. Branch offices: 520 N. Michigan Ave., Chicago; 68 Post St., San Francisco; Aldwych House, Aldwych, London, W.C. 2, England; Washington; Philadelphia; Cleveland; Detroit; St. Louis; Los Angeles; Boston; Atlanta, Ga.

Relocation authority has ten centers under way to house Jap war evacuees

Recapitulation of agency's work shows more than 300,000 acres of land will house 130,000 moved from West Coast domiciles

Size of the War Relocation Authority's task in moving and resettling Japanese evacuees from West Coast military areas became apparent last week, when a tabulation showed that ten centers comprising more than 300,000 acres of land are either in operation or in process of establishment.

The centers will have a capacity of about 130,000 persons, and will be essentially irrigation projects to reclaim public lands and areas unworked because of lack of manpower. (*ENR* May 7, p. 761)

Centers so far announced are:

Partially populated—Manzanar, Tulare County, Cal.; Tule Lake, Modoc County, Cal., and Colorado River Center on the Parker Indian Reservation, Ariz.

Construction under way—Gila Indian Reservation, Ariz.; Minidoka, in Jerome County, Idaho, and Heart Mountain, in Park County, Wyo.

Sites selected and land acquisition under way—Central Utah in Millard County, Utah; Granada, Prowers County, Colo.; Jerome, Chicot and Drew Counties, Ark., and Rohwer, Desha County, Ark.

Two other centers—one in Western Nebraska and a third in Arkansas are probable.

Mostly public land

Most of the land occupied is public domain, carved from national parks and forests. Where such land is not available or desirable, private lands are purchased by the Army, if necessary through condemnation proceedings. Care is being exercised to purchase such private land as would necessitate removal of the smallest number of present occupants.

In large, the farming operation is aimed at self-sustenance of the projects and every effort will be made to prevent competition with local farming interests.

Japanese who enlist in the work corps are paid a wage of $12 to $19 a month according to their skills, in addition to subsistence for which the Government is obligated in any event. So far, only about 1,200 of the evacuees have enlisted, the rest feeling that their subsistence is provided anyhow, the compensation offered is small, and there is considerable opposition to the discipline incident in such service.

Nub of the problem is lack of definition of the Government's obligation to the Japanese. Under terms of their evacuation, they sold or leased all properties belonging to them in their former homes, even gave up most of their automobiles and trucks. What these people will do after the war—where they will go and how they will be allowed to make a living it seems is an unanswered question both in the minds of the evacuees and at Washington.

• • •

Power company wins flood damage suit

Damages to the roadbed and track of the Hoosac Tunnel & Wilmington R.R. in the Deerfield River valley of northwestern Massachusetts in the hurricane and flood of Sept. 21, 1938 cannot be assessed upon the New England Power Co., according to the Massachusetts Supreme Court. The railroad sued the power company on the ground that the latter's opening of two sluice gates in the dam at Monroe Bridge increased the violence of the water impact on the roadbed, located from 50 to 75 ft. above the river's bed. The damage was so great that traffic could not be resumed until Nov. 7.

The court pointed out that the catastrophe was of extraordinary scope and a "vis major" or act of God. Vast areas in New England suffered severely. The opening of the gates as the tremendous rainfall continued facilitated the removal of the fllashboards, lessened danger of dam failure and reduced the extent of flooding of lands upstream as well as curtailing damage below. No evidence of negligence by the power company was presented, and the court recognized that its staff used their best judgment, based on experience in the field of hydro power operation, for the benefit of all riparian owners on the stream.

Big dredge moved east for war work

Award of large dredging contracts by the Navy at unnamed points on the Atlantic seaboard has resulted in the shipment of the dredge "Nebraska" from Ogallala, Neb. to Albany, N. Y., where the dredge now is being reassembled.

The "Nebraska" is one of two 30-in. electric hydraulic dredges built by the Bucyrus-Erie Co. for the Minneapolis Dredging Co. and the Martin Wunderlich Co. for construction of the 26,000,000 cu.yd. hydraulic fill to form Kingsley Dam on the North Platte River in Nebraska. Each dredge was equipped with 4,000 hp. motors and had a capacity of about 1,000,000 cu.yd. per month. Because of the speed required on the Navy contracts, the contractor, the Gahagan Construction Corp. of Brooklyn, N. Y., decided to purchase the "Nebraska", dismantle it and bring it by rail to Albany, where it could be reassembled and launched in the Hudson River. The entire unit, weighing 607 tons, required 48 cars, the steel hull sections presenting unusual problems on account of tunnel and bridge clearances. The digging ladder, 77 ft. long required two flat cars. In the above picture it is being unloaded at the Port of Albany by the New York Central's 15-ton wrecking crane. The hull, 125x40x10 ft. deep, consisting of three pontoons, was cut into units at the dam and now is being welded together at Albany. Work at Albany for the Gahagan Corp. is in charge of Benjamin H. Ellis, chief mechanical engineer, with Floyd Barney as assistant superintendent in charge of contract operations. Welding is being done by the Victory Marine Repair Co. of Brooklyn; sand blasting by the Oceanic Ship Scaling Co., Brooklyn; and electrical work by Andrew Schroeder, Inc., Albany. The dredge cost a half million dollars; its reassembly is expected to take three months and cost $40,000.

Usable Rock Made of Soft Miami Oolite

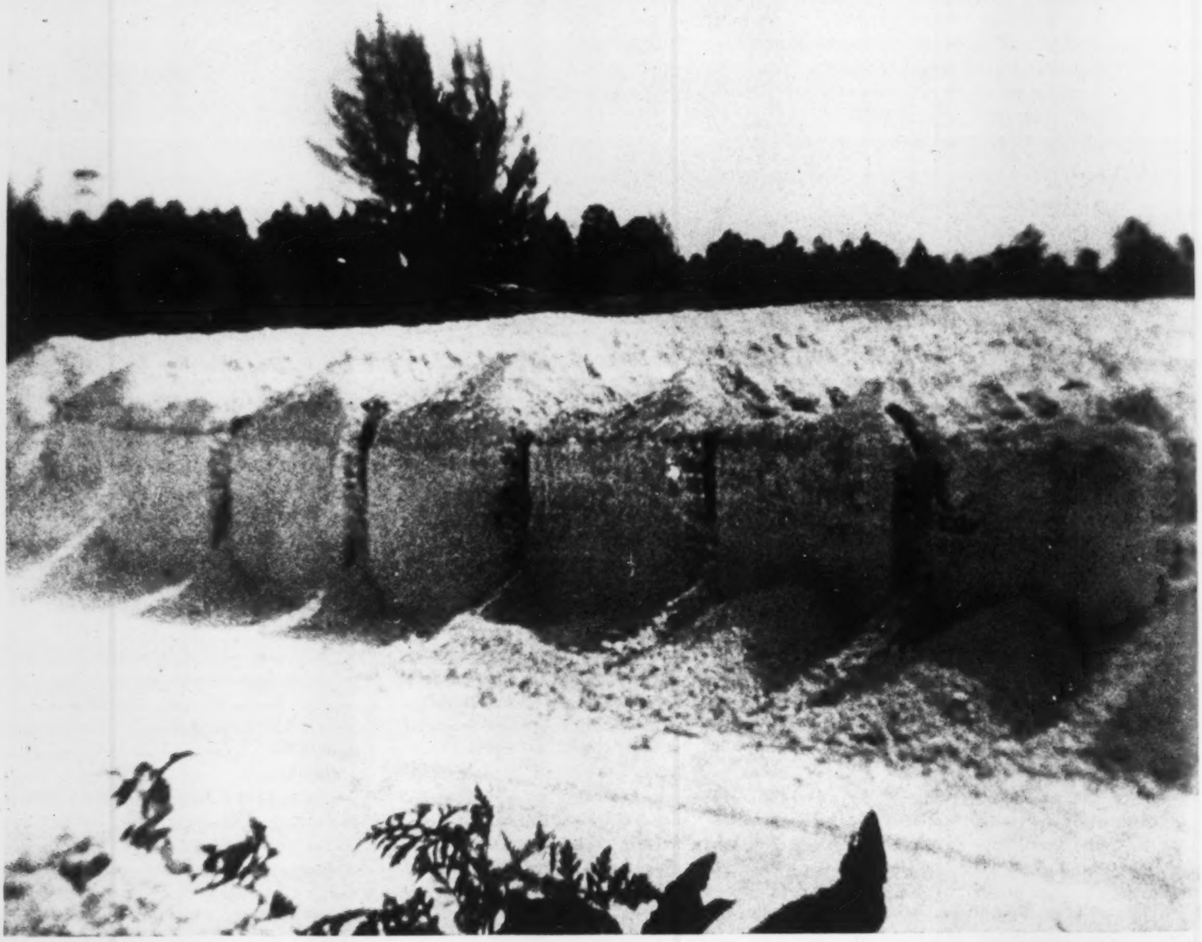
ROCK HARD ENOUGH to be used for construction work is not found in Dade County at the Southern end of the Florida Peninsula. It must be brought in from Georgia, 300 to 400 miles, making the use of rock costly in that part of the country. Now, as a result of experimental work begun a few years ago, rock satisfactory for many purposes is being made from the coral and soft limestone that is close below the surface in the region around Miami.

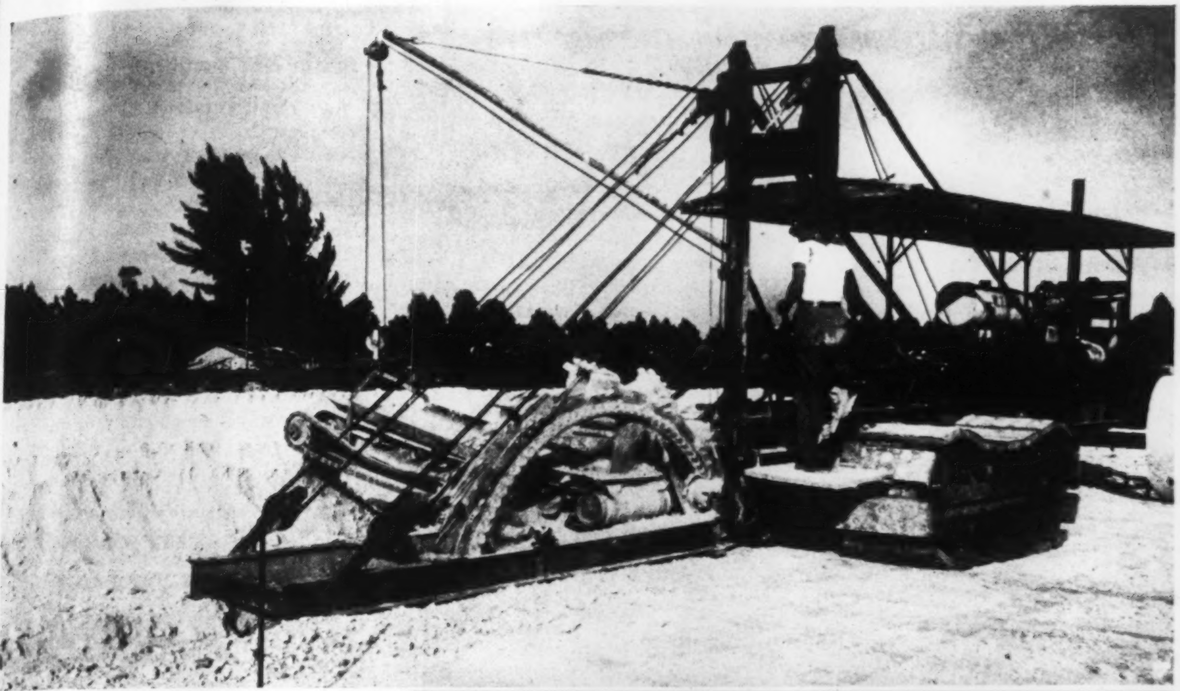
About six years ago a sizable contract for a sea wall along one of the many canals that run inland along the coast in Dade County was let to the W. T. Price Dredging Corp. Because of the high cost of imported rock, the company's superintendent suggested that a satisfactory rock might be produced by exposing the soft local rock to the air. For this trial work he proposed to use the "Miami oolite" under a piece of waste land owned by the company. That rock is quite friable when dug with a shovel or grab bucket, but hardened rapidly when exposed for a short time to warm air and sunshine. Chemical analysis shows it to be made up of 90 percent carbonate of calcium and magnesium, 2 percent of oxide of iron and alumina, and the balance, silica.

In the initial operation, the overburden was bulldozed from a small area of the waste land and the coral rock were exposed to the air. After a few weeks of seasoning, a ditcher was used to cut trenches 12 in. wide and 36 in. apart, allowing rows or walls 24 in. wide to stand. Several thousand feet of trench was cut, and the walls were allowed to season in the air.

After several weeks, the original overburden was backfilled into the trenches to provide a solid footing for the trenching machine, and trenches were then dug at right angles to the original ones, but this time at a distance of about 6 ft. apart. The overburden then was shoveled out from between the slabs, and after they had hardened, slabs approximately 5x3 ft. x 18 in. in size were knocked down with a bulldozer, loaded into trucks and hauled to the job. The slabs of rock thus

End of the slab field drying in the sunshine. The overburden had not been completely removed when this picture was taken.



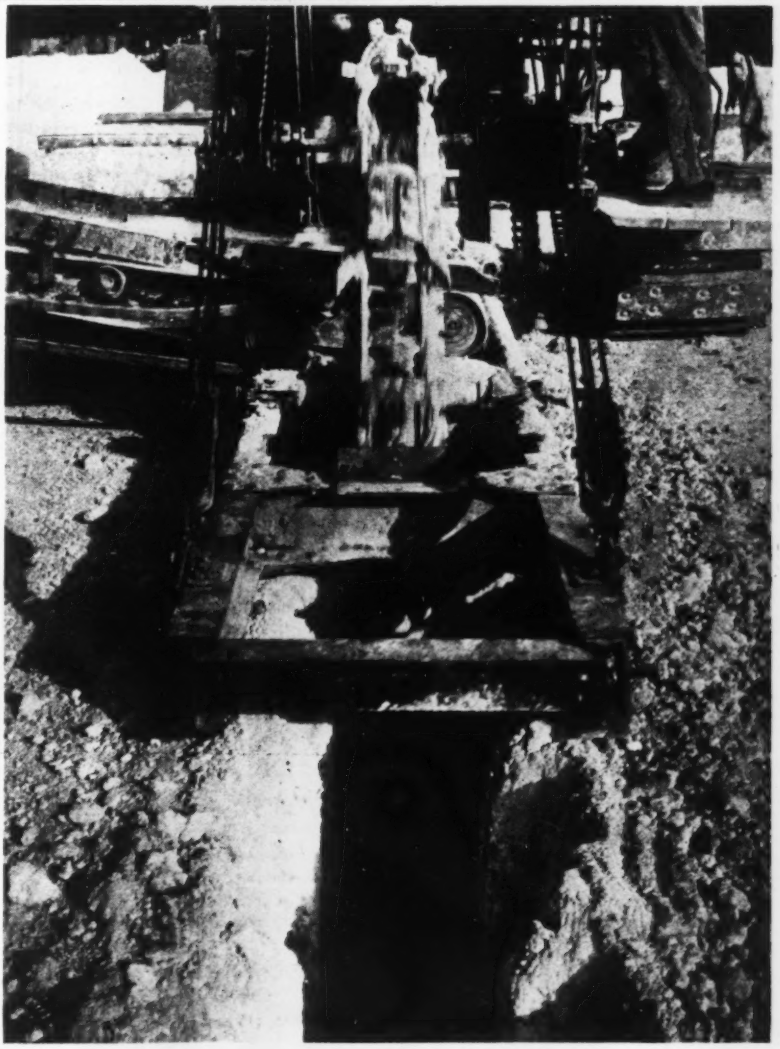


produced were uniformly good, the chief defect being occasional sand pockets. They were used to build the seawall, the lower run of which is partly immersed in sea water.

Recently the company received a large contract for rock for foundation work. Examination of the seawall showed it to be in sound condition, hence it was decided to make the foundation rock by the same process. On this latter job trenches were cut through the rock to expose over four miles of slab,* the trencher being equipped with a narrow digging wheel with a standard bucket and bucket teeth. Cuts were made in both directions to form slabs 6 ft. long, 2 ft. wide, and 3 ft. high. The spoil was sidecast into the freshly cut trenches during the longitudinal operation to fill them up so that the cross cuts could be made. The spoil then was dug out, and the standing ridges of soft rock allowed to cure and harden.

Loss during trenching and due to breakage in the operation of pushing over the slabs with a bulldozer amounted to 17½ percent. However, this material, together with the spoil from the trenches, was used subsequently for blacktop runway construction on an airport job just completed by the company.

The cost of the slabs ready for use in the foundation walls was 14.9c. per lineal foot, or an estimated saving of more than 30c. per lineal foot over imported rock.



Above: Cutting the long trenches. Spoil is backcast into the trenches already cut. Subsequently it is leveled to permit the cross-cutting. Cross trenches (at right) were cut at 6-ft. centers. Projecting ends of the slabs can be seen exposed in foreground.

Complete highway equipment survey

A survey of construction equipment owned by state highway departments and all other local governmental subdivisions has been completed by the War Production Board's Bureau of Governmental Requirements and is now available for use.

Aimed to make construction equipment now existing stretch to the farthest possible point, in view of the fact that the amount of construction equipment available for other than war needs is strictly limited, the survey represents more than six months of work by the Highway and Transport Section, headed by Louis Levenson.

As of June 30—closing date for completing the work—100 percent of the 48 state highway departments had reported the equipment in their hands; 91 percent of the nation's 3,068 counties, and 36 percent of the cities. The low percentage for cities was accounted for by the fact that many smaller communities do little or no road work, and thus have no equipment to report.

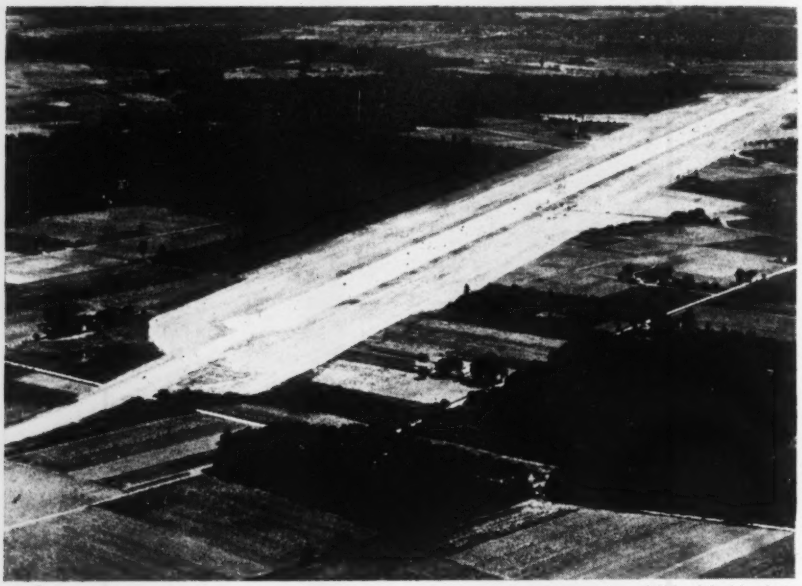
Condition of the equipment held, as well as plans for its use in the immediate future, are included in the files of the Bureau of Governmental Requirements.

The survey will be used principally to aid hard-pressed road departments in keeping their thousands of miles of roadways open and in condition for war traffic.

For example, County "A" in Tennessee needs a surface grader for a particularly important secondary road, but having no grader for the specific job it applies to the Bureau of Governmental Requirements. The Highway and Transport Section of the bureau refers the request to county "F" in the same state, which has such a grader. From there on, the counties negotiate between themselves as to length of time the scraper is needed, terms of rental, etc. Both notify the section of the transaction, so that appropriate records can be maintained in Washington.

Mr. Levenson states that the survey already has been of great value in WPB allocation problems in addition to providing help to local governmental units that otherwise would be unable to locate needed equipment.

Once entirely complete, the survey can be kept up to date by bookkeeping entries as equipment is loaned and returned.



Wide World photo

First flight strip completed for Air Corps

The first of many flight strips to serve the Army Air Forces has been completed and put into service at an undesignated point along the Atlantic Seaboard. These strips are to serve as emergency landing fields, for training purposes, and for the dispersion of aircraft in the event of attack. This one was built by widening 7,000 ft. of a concrete highway to 150 ft. Land on both sides of the road has been cleared for a length of 8,000 ft.

Congress has authorized expenditure of $10,000,000 for flight strips. Several are under construction and plans for many more are nearing completion. Not all will be built along highways, but all will be within easy access of main highways for servicing the planes.

Plans are prepared under the direction of Lt. Col. Stedman Shumway Hanks of the Army Air Forces; construction is under the direction of the Public Roads Administration.

Seattle postpones Ross Dam bid opening

As a result of a reported complication over priorities, the city of Seattle last week announced it had postponed indefinitely opening of bids for construction of an $8,000,000 addition to Ross Dam. Bids were to be opened originally on June 11, and the opening was later postponed to June 18. (*ENR*, May 21, p. 836).

The action was taken when city officials found that an A-1-C priority rating granted recently by the War Production Board covered only materials going into the dam, and did not apply to the tools and equipment the contractor might require.

• • •

Missouri court upholds defense financing act

The Missouri Supreme Court last week upheld the constitutionality of Missouri's national defense cooperation act, which empowers municipalities in defense areas containing not less than 10,000 persons, to issue revenue bonds for improvement and expansion of certain municipal services.

The case involves the right of the city of Lebanon to issue $200,000 of revenue bonds to finance its share of the cost of extending its overtaxed waterworks system. A taxpayer's suit contended that the defense cooperation act was "arbitrary and unreasonable" and contrary to other state laws.

Lebanon is 40 miles west of Fort Leonard Wood.

• • •

New York's old El cars going to war plants

A ready market has been found for the old cars from New York City's abandoned elevated railways lines. Government demands for rolling stock at the large munitions plant reservations are absorbing the stockpile from the city's dump yards.

The latest allotment of cars to be sold will be put in use at the Picatinny Arsenal of the U. S. Army in New Jersey. The city is receiving an unexpected revenue from the sale of this old equipment—$600 for the trailer type and $1,200 for cars with motors. Alterations are being made, the right-angle seats being removed and replacements are being installed paralleling the sides. It is planned to transport about 125 workers in each car.

Through the use of these cars, forming a shuttle line, it is hoped to discourage the use of private automobiles by the arsenal employees.

Fellows takes over WPA Division of Operations

Acting Commissioner of Work Projects, F. H. Dryden, has just announced the appointment of Perry A. Fellows as assistant WPA commissioner in charge of the Division of Operations. Mr. Fellows succeeds R. L. MacDougall, who has been appointed regional director of the FWA for the Southeastern States.

Since December 1940, Mr. Fellows has been chief engineer of the WPA. He will continue to serve in this capacity while assuming his new duties, which embraces engineering activities and the operation of construction projects.

Formerly city engineer of Detroit from 1925 to 1931, he was appointed chief regional engineer for the Civil Works Administration in the North Central States, in November 1933. Thereafter Mr. Fellows held administrative and engineering posts with the Federal Emergency Relief Administration and for five years was assistant chief engineer of the WPA. He holds a B.S. and M.S. degrees in civil engineering from the University of Michigan.

• • •

Far East armies use lake bed bitumen for roads

Discovery by engineers of the British Tenth Army that dried-up lake formations in Iraq contain a form of natural bitumen usable as road surfacing is said to have saved the Allied war effort much time and money in transport of materials.

The soft natural bitumen used is found in several localities. Unexploited deposits have been discovered in beds of evaporated lakes, varying in depth from 1 to 3 ft., in seams. Similar to coal although much softer, the bitumen is dug up by mechanical shovels, and is transported to roadside heating kilns, where the blocks are liquified. Twenty-five percent of crude petroleum is added to the blocks, producing an excellent road surfacing material.

• • •

Concrete bridge collapse kills Jersey workmen

Two men were killed and four others injured when the concrete arch of a highway bridge they were demolishing at Ocean City, N. J., collapsed and pinned them in the wreckage. The dead included Winfield Dougherty, 60, construction superintendent for the Ocean City Public Works Department.

The bridge, located on Seventeenth Street, was condemned a year ago and the men were working on top of the span when the concrete suddenly gave way.

Guards symbolize importance of water supply

These two members of the California state guard, meeting at the ends of their respective posts along a section of the Los Angeles aqueduct, attest the great importance attached to adequate water supply in wartime.

In addition to several detachments of state guard troops who watch over the aqueduct, the Los Angeles water department also maintains a force of several hundred of its own armed guards at key points in the system.

New plywood grade introduced by WPB

As a means of increasing production of moisture-resisting plywood without a major change in industry practices, the War Production Board July 1 ordered reduction of the number of standard sizes from about 4,300, now available, to less than 300.

In ordering the reduction, WPB's Lumber Products Branch introduced a new plywood grade—"sound one side"—that is expected to provide considerable savings to manufacturers and users.

Standardization of the industry's product is expected to add about 240,000,000 b.ft. to the current yearly production, estimated at two billion feet of all types of plywood. About 12 percent of the total production is so-called "waterproof" plywood for use as bulkheads, outside facing for buildings, and the like.

Introduction of the new grade will, according to WPB, permit manufacturers to utilize cheaper woods, and provide as satisfactory service for the consumer as is now possible. Present plywood grades are wallboard—prepared for painting after installation, and smooth both sides—heretofore used almost exclusively for inside room facings that are to be varnished or left in their natural colors.

"Sound one side" provides for a facing "reasonably free of defects", while the back need not be a perfect strip of wood. WPB feels that the simplification will work no hardship on the consumer, since only one side of the board is visible to a room's occupants anyway.

The standardization in sizes as set out in the order, known as L-150, include:

Standard panels: Sound two-sides, 24-30 in. wide by 60-72 in. long, in ⅛ to 3/16 in. thicknesses. Sound one-side, 36-48 in. wide by 84-96 in. long, in ¼ to ¾ in. thicknesses.

Wallboard: 48 in. wide by 60 to 144 in. long, in thicknesses ¼ in. to ½ in.

Sheathing: 36-48 in. wide by 96-144 in. long, in thicknesses ¼ in. to ¾ in.

Concrete form panel: 36-48 in. wide by 60-96 in. long, ¼in. to ¾ in. thick.

The order will not prohibit delivery or receipt of plywood of other sizes in stock as of July 1, or which had been processed in such a manner that a change-over would be impractical. Special orders by the armed services also are exempted by the new order.

"There's where the top of the next lift will be," says **W. B. WOLFENDALE**, design and construction engineer of the Seattle Department of Lighting as he points out a prominent crag 160 ft. above the present top of Ross Dam to **B. E. TORPEN**, principal engineer in the Corps of Engineers' Portland district office. Mr. Torpen was consulting engineer on the original 290-ft. high Ross Dam, and will act in the same capacity when the second stage of the construction is undertaken in the near future.

MEN AT WORK

ROBERT McCARTHY (left) well known California contractor, offered to build an alien reception center (145 buildings 20x100 ft. in plan) at Tanforan, near San Francisco, with better finish and for less money if plywood could be substituted for the standard board-and-batten walls. This was a rush job; bids were called and contract was let on the same day; only two days were used in getting men and materials to the site and the job was finished in 10 working days. At the right is TED JOHANNS, general superintendent for McCarthy.

WILLIAM C. MABEE, (below) chief engineer of the Indianapolis Water Co., who celebrated his 40th anniversary of service with that company last month.

To obtain maximum power benefits from the water diverted around Niagara Falls, a $1,000,000 project is now under way upstream of the falls. Construction includes erection of a 2,600-ft. cableway for placing stone for a 2,200-ft. submerged weir. Three men holding responsible duties on the work are, left to right: HARRY LEWIN, cableway operator; E. M. ROBBINS, associate engineer in charge of all rivers and harbors construction for the Buffalo district of the U. S. Engineers, which is doing the United States' share of the work; and C. G. CLINE, supervisor of all Canadian construction for the Dominion Department of Transport.

In direct charge of Oklahoma City's $6,900,000 waterworks improvement program now underway is STONER K. McCLELLAND (below). His job is a big one as the city decided to do most of the earthwork, which includes 4,200,000 cu.yd. of fill for an earthen dam, by force account when all bids received for the work were extremely high. He reports to City Manager H. E. Bailey.

The Tulsa, Okla., district, U. S. Engineers is building a new type of low cost pavement making use of "chats" or a waste from zinc and lead mines. Among those playing an important part on the construction are FRANK A. JOHNSON (right), soils and concrete technician, U. S. Engineers, and JOHN W. KELLY, Johnson's assistant.

COL. FRED T. BASS, U. S. district engineer at Cincinnati, is standing by the 12-ft. runner for one of the six 1,500-cfs. pumps going into the Mill Creek Barrier Dam at Cincinnati. Col. Bass was relieved of his duties July 1 to assume command of military training at Carnegie Tech.

As consultant on the work, V. V. LONG, President, V. V. Long & Co., is contributing much to the $6,911,000 city waterworks improvement program at Oklahoma City.

FRANK A. NIKIRK, civil engineer for the Caterpillar Tractor Co., Peoria, Ill., has been appointed coordinator of equipment for the S. W. Div. of the Corps of Engineers.

N. A. F. CRUGER, (below) is the engineer-in-charge of sewage disposal plant construction of Camp Kilmer, Stelton, N. J., for the John A. Johnson Contracting Corp.

MEN AND JOBS

W. O. Kively, office engineer for the Montana highway department, and a department employee for 21 years, has resigned to do war work in the West Indies.

F. W. Pickworth, Sioux City, Ia., who has been a sanitary engineer with the city and county health department since 1939, has been commissioned a first lieutenant in the army sanitary corps.

Len Lauster of Bismarck, N. D., has been appointed acting chief sanitary engineer for the state health department.

Ray Brant, engineer for the village of Medina, Ohio, has resigned to become associated with the Scioto ordnance plant at Marion, Ohio.

Jean Asselin, formerly city manager of La Tuque, Que., and a civil engineer, was appointed recently as city manager for Three Rivers, Que.

C. C. Coykendall, administrative engineer for the Iowa State Highway Department, has obtained leave to act as field engineer for Lytle & Green Co., contractor for the north end of the Alaska highway.

Munn McLean, inspector on construction and concrete culvert work for the North Carolina State Highway and Public Works Commission, has resigned to accept a position as engineer in the U. S. War Department's office at Fort Bragg.

Col. William M. Wanamaker, Denison District Engineer, was recently promoted to his present rank from the rank of Lt. Col.

L. L. Vaughan has been appointed acting dean of the School of Engineering of North Carolina State College, Raleigh.

Capt. George Cox of the Corps of Engineers, will have charge of building a municipal airport at Beeville, Texas.

William Work Merritt, civil engineer of Wilmington, N. C., who has recently been connected with the V. P. Loftis Construction Co. in the building of a marine base at New River, N. C., has just been commissioned a lieutenant, junior grade, in the U. S. Navy, and has been assigned to Norfolk, Va., for duty.

Melvin D. Williams, district engineer for the Public Roads Administration at Juneau, Alaska, has been appointed as representative of the Federal Works Agency on the Alaska War Council. Mr. Williams has been district engineer for PRA at Juneau since 1919.

Leslie West, chief engineer of the Joint Meeting for Sewage Disposal, Elizabeth, N. J., has received a captain's commission in the Sanitary Corps, U. S. Army. He has obtained a leave of absence from his present position, starting Aug. 1.

Theodore S. Bogardus, formerly assistant city engineer at Meadville, Pa., recently became associated with Havens & Emerson, consulting engineers of Cleveland.

Daniel McLeod, director of public works of Stratford, Conn., has been named acting town manager to replace William H. Shea, who has been granted an indefinite leave of absence because of ill health. Mr. McLeod was graduated from the University of New Hampshire, and has a wide experience as a highway engineer.

James G. Wallace, city manager at Wilmington, N. C., since August 1941, has just resigned to accept a similar position at Kenosha, Wis. His resignation will become effective as soon as his successor at Wilmington can be named.

Prof. D. V. Terrell, head of the civil engineering department of the University of Kentucky, was recently made assistant dean of the College of Engineering. A new highway research laboratory has been set up at the U. of K. for testing materials and will be under the supervision of Professor Terrell.

S. C. Martin, senior sanitary engineer with the state department of public health for Illinois, reported to Fort Benjamin Harrison, Indianapolis, Ind., on June 18, for service as first lieutenant in the U. S. Army Sanitary Corps.

C. W. Smedberg, city manager of Greensboro, N. C., has been named as North Carolina consultant, Civilian Defense Board, for the 4th Corps Area with headquarters at Atlanta, Ga.

Harold H. Slater, formerly of the county engineer's office at Wooster, Ohio, has been made a captain in the field artillery and is stationed at Fort Knox, Ky.

William H. Stowe, former engineer of Summit County, Ohio, is with the U. S. Engineer Corps at Cincinnati.

T. D. Shields, field engineer for the Portland Cement Association with headquarters in Abilene, Texas, has been notified of his appointment as captain in the Army air forces, and reported to Lowry Field, Denver, Colo., on June 21. Mr. Shields had been stationed in Abilene since 1925. He is a graduate civil engineer from Virginia Military Institute.

Walter W. DeCherrie has returned to his post of assistant state planning engineer for the Illinois State Planning Commission at Chicago after a temporary leave of absence during which he was associated with Alschuler & Friedman, Chicago architects, on a war plant project.

Stanley M. Horn, formerly in the county engineer's office at Mansfield, Ohio, has accepted a position with Holabird and Root, architects and engineers for the Scioto Ordnance Works, Marion, Ohio.

W. S. Lawrence, formerly in the Ashland Planning Office of the Ohio State Highway Department, is now in the U. S. Engineer Corps, stationed at Camp Claibourne, La.

Eugene C. McKibben, professor of agricultural engineering at Iowa State College for 14 years, has resigned to become head of the agricultural engineering department at Michigan State College as of Sept. 1.

Edward M. Beardslee, Atlanta, Ga., civil engineer, was appointed June 17, as city manager of Deland, Fla. Mr. Beardslee succeeds William J. Deegan, who was appointed co-ordinator of the recently organized Florida State Manufacturers' Pool by Governor Holland.

Juel Nelson of Mantorville, Minn., assistant county engineer for Dodge County, has resigned to accept a position in the construction of the Gopher Ordnance plant.

H. A. Maple, representing the Seattle, Wash. office of the Corps of Engineers has opened an office at Prince George, B. C. for the Trans-Canadian-Alaskan Railway Survey location.

G. D. Archibald, city engineer of Saskatoon, Sask. is now engaged on the British Columbia-Alaskan Railway survey project.

Maj. William George Swan, one of the best known technical engineers in western Canada, has been promoted to the rank of lieutenant-colonel and will continue to serve as district engineering officer M.D. in Victoria, B. C. Lt.-Col. Swan was formerly director of construction for the Wartime Supply Board at Ottawa, and was in charge of design and construction of the Pattullo Bridge and of the First Narrows Bridge at Vancouver.

BRIEF NEWS

VOTERS at Wilmington, N. C., recently approved the issuance of $600,000 in bonds to meet the city's share of the costs of a new municipal water supply system. The Federal Works Agency has agreed to put up 60 percent of the cost of the project, with the city providing the remaining 40 percent. The project is designed to provide the city with a salt-free supply and at the same time care for recent rapid growth due to military bases and defense industries in the area.

THE steel portion of the Tacoma Narrows suspension bridge which remained standing after collapse of the structure in 1940, will be removed as soon as bids for the work are awarded. Bids will be received at Olympia until July 18 for removal and salvage of the two main cables, the two main towers and minor steel parts in the west approach.

THE $6,000,000 flood control project near Williamsport, Pa., has been halted for the war's duration. The first unit, a 3-mile dyke along Lycoming Creek and a portion of the Susquehanna River, was almost finished at the time work was stopped. Another flood control project stopped recently by the army engineers' policy of eliminating non-essential construction was the $8,500,000 flood control project near Clearwater, Mo.

CONSTRUCTION of wooden pipelines to carry oil for relief of the critical fuel shortage in the east was suggested by Rep. John M. Coffee of Washington. Coffee said such pipelines have been used successfully for 30 to 50 years in municipal water systems in his state.

TO INSURE greater protection to more than 11,000 plants engaged in the manufacture of war materials, Lieut. Gen. Brehon B. Somervell, Chief of the Services of Supply, last week ordered that civilian plant guards at these plants be organized as an auxiliary to the Army's Corps of Military Police.

• • •

Industry gets preference in gasoline rationing

Engineers and construction men who must use their cars to reach their work are among 14 classes of preferred passenger-car users who may obtain more than 37 gals. of gasoline per month (the maximum for business users) under new rationing provisions.

A listing of the preferred classes was issued unofficially to local rationing boards this week, and will probably be made official within another week.

Under the list, "engineers, architects, technicians, supervisors, repair and maintenance men or other workers who render service, transport material and equipment necessary for construction, repair, installation or maintenance" of other than portable household appliances, may apply for additional ration as needed.

Construction men must explain to rationing boards the distance they must drive to reach their jobs, show that there is no other means of reaching the work. They will be issued sufficient ration cards to cover their needs.

The regulation does not apply to trucks or off-the-road equipment, which can obtain needed fuel without rationing.

Barton Jones leaves TVA to head Peruvian project

Barton M. Jones has recently gone to Peru under contract with the Peruvian government as chief engineer to supervise the location, design and construction of a hydro-electric power system recently authorized by that government. The project is in the Santa Valley about 200 miles north of Lima. The development, on Rio Santa, about 80 miles from the coast and at an elevation reaching 6000 ft., will include a diversion dam and about 5 miles of large diameter tunnel. A head of nearly 1300 ft. will be produced giving an ultimate capacity of 100,000 kw. of continuous power from water supplied by nearby perpetual snow and glaciers.

Previous to accepting the work with the Peruvian government Mr. Jones was with the Tennessee Valley Authority for nine years, being one of its first employees. He served consecutively as construction engineer on Norris Dam, chief design engineer on all TVA projects, consulting design engineer, and as head of the Project Planning Division.

Prior to his TVA work Mr. Jones was in charge of design and construction for the Pueblo (Colo.) Conservancy District and the Miami (Ohio) Conservancy District.

Blandford appoints six NHA regional directors

National Housing Administrator Blandford last week announced appointment of the first six of 10 regional directors who will be charged with supervision and formulation of war housing programs in their areas.

Appointments were:

William K. Divers of Cincinnati, director for Michigan, Ohio, Kentucky and West Virginia, with headquarters in Cleveland.

Eugene Weston Jr., Los Angeles, director for California, Arizona, Nevada and Hawaii, headquarters in San Francisco.

Robert K. Creighton of Rock Hill, S. C., director for North and South Carolina, Tennessee, Mississippi, Alabama, Georgia and Florida, headquarters in Atlanta.

George W. Coplen, Seattle, director for Washington, Oregon, Idaho and Montana, headquarters in Seattle.

Charles S. Ascher, director for Region 2, New York.

Willard O. Day, director for Region 3, Washington, D. C.

• • •

Senate group approves Florida barge canal

Attempting to provide for the fuel needs of the Eastern Seaboard, the Senate Commerce subcommittee last week approved a bill authorizing construction of the Florida pipeline and barge channel (*ENR* June 18, p. 966) and construction of another pipeline to link the Charleston-Savannah area with the Tinsley oil fields at Yazoo, Miss.

The Florida project will cost about $80,000,000. The Tinsely Project—to be built by the American Liberty Pipe Line Co., of Dallas, Tex.—about $13,000,000. The Tinsley line, of eight inch dia., will be built of salvaged pipe, and have a capacity of 35,000 bbl. daily.

In approving the measure, the committee accepted an amendment that would permit closer drilling of wells in the Tinsley area, as a means of raising the field's production immediately.

• • •

Concrete ship for British

The first ferro-concrete ship built in a British shipyard, a 2,000 ton dead weight motorship, is now in service as a coastal vessel. The vessel, christened "Lady Wolmer" was launched July last year and was to be ready for sea in September but delays were encountered in completion. Another ferro-concrete ship is understood to be under construction for private interests.

Army engineers build floating bridges to supplement capital communications

First of new wooden structures across Potomac opened for service to Arlington, Va., three others under construction at present.

Built to supplement Washington's vitally-important highway connections with the Virginia mainland, the Corps of Engineers last week opened a combination trestle and pontoon bridge at 14th Street, S.W., connecting to U. S. Route No. 1. The structure is the first of four planned by the Army. Quicker access to the Washington National Airport and to the new building for the War Department in Arlington, Va., will be provided.

The 14th Street Bridge is composed of 2,031 ft. of trestles and ramps, 640 ft. of pontoons, 709 ft. of approach roads, and a fixed steel span providing an opening 50 ft. wide and 21 ft. high on the Virginia side. Approaches carry over the Memorial Parkway in Virginia, using two 55-ft. spans.

Started in May, 1942, the bridge has been built in record time. A total of 30 pontoons, each 12 ft. by 65 ft. was used, each pontoon requiring 13,500 b.ft. of lumber. Capacity of the two-lane structure is 15 tons at normal speed. Flooring is of treated wood.

At the trestle terminals on both the Virginia and District of Columbia sides, there are 55-ft. ramp spans, hinged to the trestles to allow for movement with the tide. With the exception of these spans and the fixed span on the Virginia side, the bridge is built entirely of wood.

The pontoons are anchored, upstream and down, to 7½-ton concrete anchors by means of ⅝-in. wire cables.

Other bridges planned by the Army engineers are as follows:

The Wisconsin Avenue Bridge, crossing the Potomac and Little rivers has a terminal at the foot of Wisconsin Ave. and connects with the George Washington Memorial Parkway in Virginia, via Theodore Roosevelt Island. This bridge will comprise 722 ft. of trestle and ramps, 972 ft. of connecting roads and approaches, and an opening of 684 ft. for pontoons on the District of Columbia side.

The Constitution Avenue Bridge, crossing the Potomac, with a terminal on Potomac Parkway near Constitution Avenue, connects with the highway system at the upper end of Columbia Island. It will comprise 1,152 ft. of trestle and ramps, 553 ft. of pontoons, 245 ft. of connecting roads and approaches, and a 100-ft. scow drawspan.

The Virginia Avenue, Southeast, Bridge, crossing the Anacostia River with a terminal at the foot of M St. near Virginia Ave., S.E., connects with the Anacostia Parkway. It will comprise 891 ft. of trestle, 1,450 ft. of approach roads and a fixed steel span providing an opening 50 ft. wide and 14 ft. high.

Contractor on the 14th Street Bridge was the Frederick Snare Corp. of New York. J. E. Greiner Co., of Baltimore, Md., was architect-engineer for field inspection, and plans were drawn by the office of the District Engineer at Baltimore.

• • •

Navy dedicates building donated by job workers

Admiral Ben Moreell, chief of Bureau of Yards and Docks, U. S. Navy, dedicated the new microfilm storage house at the U. S. Naval Ammunition Depot at Burns City, Ind., on June 14 with appropriate ceremonies. The building is unusual in that it was built entirely from funds contributed by employees of Maxon Const. Co., contractor for the project, and others connected with the job. Nearly 7,000 workers donated one day's pay, raising about $65,000. This fund was turned over to the navy, which invested it in the film storage building, the only building of its kind in the navy.

PRA extends road material control to mid-west

The Public Roads Administration last week announced it had extended control over the use of bituminous material in public highway work from the 17 Atlantic Seaboard states to include all states up to the western borders of New Mexico, Kansas, Nebraska and the Dakotas.

States newly included in the control area, are Alabama, Arkansas, part of Florida, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Mexico, North and South Dakota, Ohio, Oklahoma, Tennessee, Texas and Wisconsin.

The extension of control was made at the requests of Harold L. Ickes, Petroleum Coordinator.

The procedure to be followed by governmental agencies applying for bituminous material is based on Recommendation No. 45, amended, of the Petroleum Coordinator. Applicants for a certificate of necessity for use of bituminous road material must be authorized representatives of governmental agencies, and must make applications to the PRA on a special form, B-1. All applications, except those of federal agencies, must be submitted to state highway departments, which, in turn, submit them to the PRA for review and ruling. To be passed, roads must be considered needed for prosecution of the war.

Acme News pictures

Inspect new pontoon-trestle bridge across Potomac

Col. Leslie Groves (on pontoon at left), deputy chief of the Construction Division, Corps of Engineers; Maj. Gen. Eugene Reybold, Chief of Engineers, (pointing) and Maj. Gen. T. M. Robins, chief of the Construction Division, examine the first of a group of four pontoon trestle bridges being built over the rivers at Washington, D. C.

TVA plans public freight terminals to aid river valley shipping firms

Four structures planned to cost $600,000 under new federal appropriations for the TVA. Work to start as soon as possible.

Congressional approval last week of the Tennessee Valley Authority appropriation bill has resulted in plans being drawn for immediate construction by TVA of four public freight terminals on the Tennessee River. They will be located at Knoxville and Chattanooga. Tenn., and at Guntersville and Decatur. Ala. According to Gordon R. Clapp. TVA general manager, work will be carried forward as rapidly as possible, but date of completion will depend largely upon the speed with which construction materials can be obtained. The terminal project is estimated to cost $600,000.

A recent estimate of prospective commerce, made by TVA on the basis of information supplied by approximately 3,700 shippers in 191 cities and towns of the Tennessee Valley area, and based on normal peacetime conditions, indicated that by 1945 the water freight movement at Knoxville, Chattanooga, Decatur, and Guntersville, through both private and public terminals, could be expected to reach more than two million tons. About $3,000,000 would be saved by using the water route by comparison with overland freight rates. The estimate is contingent upon the provision of adequate terminals and barge-line services, and the establishment of joint water-rail rates.

The four terminals to be erected will serve a wide inland area taking in parts of Georgia, Alabama, Tennessee, Virginia, Kentucky, the Carolinas, and Mississippi, including the cities of Atlanta, Ga.; Birmingham, Ala., and Bristol, at the Virginia-Tennessee line.

Design of the terminals is being so developed as to eliminate critical materials and equipment. The wharves will be of timber construction instead of the usual sheet steel originally proposed. Stiff-leg derricks made principally of heavy timber will be substituted for steel gantry cranes, and the dock houses, which ordinarily would have been built of galvanized sheet iron over steel framing, will be constructed of cinder blocks with roofs supported by timber trusses. The freight houses will contain office space for the terminal superintendent and assistants, waiting room for laborers, storage space for equipment, supplies, dunnage and freight, and trucking aisles.

All four terminals will be so designed that the freight-car loading tracks and the highway truck roadways will be brought as close to the cargo barges as practicable. The freight houses are not intended to serve as storage warehouses but only to hold over a comparatively small volume of freight from the time it is delivered to the terminal until the arrival of trucks or barges.

The Chattanooga terminal will have an estimated maximum car-loading capacity of 175,000 tons of package freight a year, and the Decatur, Knoxville and Guntersville terminals will have a maximum capacity of 100,000 tons.

• • •

Steel Institute creates position of manager

Due to the increasing problems facing the industry as a result of the war, and in view of the resulting increase in work imposed upon the American Institute of Steel Construction, the board of directors last week announced it had decided to create the position of manager. The appointment does not otherwise alter the staff of the Institute in personnel or functions, all of which are continued.

L. Abbett Post, vice president of Post & McCord, New York erectors of structural steel, has been engaged to fill the new office. His duties will be assigned to him by the board and the executive vice president of the Institute.

FWA takes over Puerto Rico electric producers

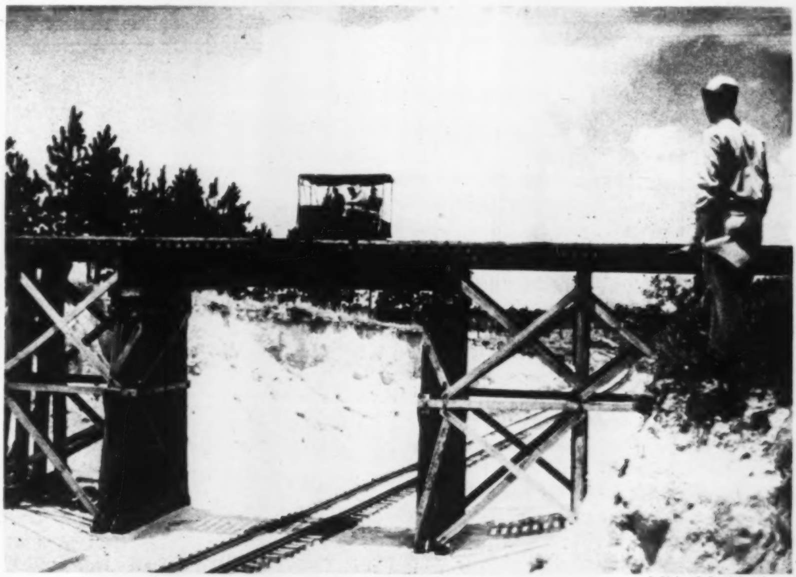
Moving to strengthen the war position of one of the links in the U. S. "defense chain" in the Caribbean sea, the Federal Works Agency last week took title to the two major privately-owned power companies in Puerto Rico.

The U. S. District Court at San Juan, after signing an order giving the FWA possession and title to the Puerto Rico Railway Light and Power Co. and the Mayaguez Light, Power and Ice Co., accepted a deposit of $7,250,000 in checks to cover the appraised value of the properties. Condemnation proceedings were started immediately.

Brig. Gen. Philip B. Fleming, FWA administrator, said that unification of the island's power systems will help save fuel and relieve difficulties of oil transport. The systems will be integrated with publicly-owned utilities and operated for the FWA by the Puerto Rico Water Resources Authority.

This authority now owns and operates several hydro-electric generating plants, which will be substituted as power sources for the steam plants now operated by the companies.

The Puerto Rico Railway Light Co. operated a system in the northeast portion of the island, including San Juan, serving a population of about 700,000. The Mayaguez company served the extreme southwestern portion, with a population of about 65,000 persons.



Wide World photo

Army builds structure for own railroad

The 711th Engineers Railroad Operating Battalion has built and is using the sturdy bridge shown above as a part of a 48-mile line built between Camp Claiborne and Camp Polk, La. Crews working from both camps expect to complete the line July 11.

The 711th, first of its kind organized, drew specialists to its ranks from many railroads.

WASHINGTON HIGHLIGHTS

Additional storage facilities to cost about $10,000,000 will be built by the War Department this summer to accommodate lend-lease equipment. Of temporary construction, the buildings are scheduled for completion early in the fall and will provide 18,000 carloads of open and closed storage. Sites were withheld.

Contracts for construction of 28 wooden barges 180 ft. long and 750 deadweight tons at 11 ft. draft were awarded last week by the Maritime Commission to seven shipyards on the Atlantic and Pacific Coasts, and on the Great Lakes. Not more than five vessels were awarded to any single contractor. First barges must be delivered within 150 days of contract signing. Total cost will exceed $3,000,000.

Settling one of the most controversial points in the Interior Department's supply bill for the fiscal year 1943, the House this week accepted a Senate amendment to the bill providing $3,900,000 for power lines and engineering surveys for the Central Valley, Cal., power project. Funds were asked by the Bureau of Reclamation to cover construction of power lines from Shasta Dam to Antioch, Cal., and for a steam generating plant.

The deadlock over appropriation of funds to provide housing for Capital war workers was broken last week, when House and Senate conferees agreed on a $32,500,000 program including construction of family dwelling units. As approved by conferees who had been unable to reach agreement as to whether all dormitories, or all family units should be built, the bill provides $3,000,000 for 1,000 temporary-type family units; $12,000,000 for dormitories to house an unspecified number of occupants, and $17,500,000 for public works—sewers, utilities, etc. Government war agencies will certify employees for occupancy of the new units when completed.

A large group of slow-moving, non-critical building materials is specifically released from the restrictions imposed by Suppliers' Inventory Limitation Order L-63, under terms of exemption No. 5, issued last week by the Division of Industry Operations. Dealers holding stocks of the following materials: portland and natural cement, lime, gypsum and gypsum products, bituminous roofing materials, concrete pipe, cut stone, sand and gravel, crushed stone, clay products, insulation-board, acoustical materials, mineral wool, paving materials, concrete products, glass, and wooden mill work need no longer include them in the records and reports called for by L-63, although they remain subject to inventory restrictions of Priorities Regulation No. 1.

Congress' refusal to appropriate funds to carry on activities of the CCC last week was seen as having a probable beneficial effect to construction men in that it may make available a large reservoir of construction equipment for Army use. The industry has long feared requisitioning of increasingly-scarce machinery for use on work in this country and overseas, now feels that CCC's equipment may at least stave off that possibility. Incidentally, since Congress voted some $8,000,000 for CCC's liquidation and gave the agency a year in which to liquidate, insiders look for a renaissance of the organization after the war.

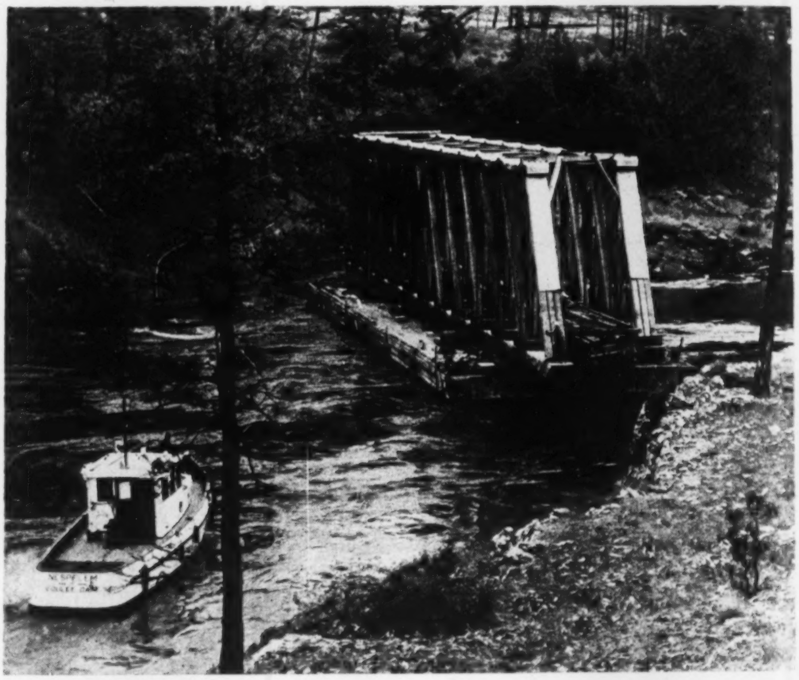
Completing the organization of nine regional offices as part of its efforts to decentralize activities (*ENR*, June 4, p. 897) the Federal Works Agency last week announced appointment of three more regional directors. They are: Rex Lee Nicholson, Salt Lake City, Utah; R. L. MacDougall, Atlanta, Ga., and George H. Field, Chicago, Ill.

Relative scarcity of different types of steel is set forth in the latest materials list issued by WPB.

Campaign to cut accidents begun by Safety Council

Backed by a Presidential proclamation urging the National Safety Council to expand its accident prevention work, a campaign for a War Production Fund to Conserve Manpower, headed by W. A. Irvin, former president, U. S. Steel Corp., has succeeded in raising $1,000,000 during its first two months of operation. The goal set is $5,000,000, and contributions are being sought from large companies, including construction contractors, who would benefit from a reduction in accidents.

The stepped-up program would represent a 150 percent increase over the National Safety Council's normal annual expenditures. The aim is to effect a reduction of at least 20 percent in the over-all accident toll, which would mean 92,000,000 man days of production saved over last year's losses. Last year 18,000 workers were killed by occupational accidents, while an additional 29,000 were killed in off-the-job accidents. Attesting to the importance of the campaign Donald Nelson, War Production Board chief, stated that "Our war effort and our economy will be seriously affected unless tested accident-prevention techniques are extended into all spheres of our national life." Mr. Nelson urged support for the program.



Remove last bridge from Coulee Lake area

The last of the bridges that once carried traffic across the Columbia River and its tributaries in the area to be covered by Coulee Lake is shown above, enroute from its site on the Kettle River to the scrap yards. This structure is a timber span, and comprised part of a railroad crossing. Sound lumber in the bridge will be salvaged.

A yardstick for measuring wartime building

New York's Regional Director John M. Gallagher of the Federal Works Agency recently laid down a five point program to be used as a yardstick for measuring **all building operations in the Northeastern States for the duration of the war. The five points covered are:**

1. Immediate construction is essential to the war effort.
2. It is not practicable to rent or convert existing facilities for the same purpose.
3. The construction contemplated would not duplicate or unnecessarily expand facilities now available.
4. All possible economies have been effected through drastically simplified design, elimination of non-essentials and limiting the use of metals to an irreducible minimum.
5. Labor and materials are immediately available for construction.

"These conditions," Director Gallagher said, "have been laid down as a directive for all public and private agencies. They were approved by the Secretary of War, Secretary of the Navy, and the chairman and director of the production division of the War Production Board.

"It has been made clear that the restrictions are to govern public and private construction alike for the duration of the war, and that penalties will be imposed on those who ignore or attempt to evade them.

"All federal agencies concerned with any aspect of the construction program are required to conform to these general policies."

• • •

Davis Dam award made under wartime powers

Secretary of the Interior Harold L. Ickes has just approved a wartime construction contract for Davis Dam and powerhouse on the Colorado River, as announced by the U. S. Bureau of Reclamation.

Finding that "the prosecution of the war will be facilitated by the execution of a contract containing the terms and conditions recommended" by Commissioner of Reclamation John C. Page, Mr. Ickes approved clauses in the contract which make allowance for sudden termination by the Government and for possible priority delays.

The contract was awarded to the Utah Construction Co. of San Francisco, Calif., on its low bid of $18,966,392. Associated with the winning contractor for the big dam are 8 other construction firms of long experience in the field, several having participated in the construction of Boulder Dam.

They are Morrison-Knudsen Co. of Boise, Idaho; MacDonald & Kuhn, Inc., of San Francisco; J. F. Shea Co., Inc., of Los Angeles; J. H. Pomeroy & Co. of San Francisco; Winston Bros. Co. of Minneapolis; Raymond Concrete Pile Co., Griffith Co., and J. Stanley Bent of Los Angeles.

A hydroelectric power plant of 225,000-kilowatt capacity—4 generating units of 45,000 kilowatts each—will be built at the left abutment of the dam.

Third largest earth and rock-fill dam undertaken by the Bureau of Reclamation, Davis Dam will be 200 ft. high, 1,600 ft. long and have a volume of 4,230,000 cu. yd. Only Anderson Ranch Dam in Idaho and Green Mountain Dam in Colorado, now under construction, are more massive.

Public may be kept from sewage-polluted beach

Since California's Department of Public Health revoked the permit under which Los Angeles has been operating a sewage screening plant at Hyperion and discharging raw sewage into the ocean, (*ENR*, May 28, 1942, p. 885) that city has sought means of relieving the situation. Funds for necessary improvements might be raised through a charge or tax on those who use the city's water service, and such a plan is now under consideration. Meantime, it is proposed that the 1½-mi. beach front adjacent to the Hyperion plant be fenced off and posted to keep the public away from that portion of the beach which is under jurisdiction of the Board of Public Works.

Speeding the war effort:

The tempo of America's war effort continues to be stepped up at an increasingly faster rate, through governmental agencies and public and private industry. Here are some developments of the past week, of special interest to engineers and constructors:

The War Production Board acted to expedite the extension of utility services, such as electricity, gas and water, to thousands of war housing units throughout the country. Under an amendment to P-46, utility extensions to housing projects are assigned the same preference ratings as are assigned to the housing projects themselves. Heretofore extensions to housing projects were specifically excluded from the automatic rating assigned by P-46. In order to facilitate the use of the preference rating, new procedures have been developed under which utility applications for housing extensions will be reviewed in the field and will be processed simultaneously with the housing project application, thus saving considerable time.

The new procedure for decentralizing approval of applications for utility extensions will work like this:

The builder will ask his local FHA office to approve the construction of a privately financed war housing project. If his application discloses that it is practicable and necessary to build, he will be given a letter requesting the local utilities who will service the project to prepare an application. The utilities will survey the job and make applications for permission to construct necessary extensions. Instead of sending this application to Washington for approval as heretofore, each utility will submit it to the FHA office which is reviewing the construction applications. From this point on, utility applications and the construction applications will be handled together until they are approved or denied by the field office of the War Production Board in that area. These offices are now, for the first time, vested with authority to approve or deny such applications.

Mandatory segregation of alloy steel scrap to conserve scarce alloying elements and permit their reuse, was ordered during last week. Savings resulting from this order are expected to add nearly 50 percent to the amounts now recovered by present methods in steel mills. At the same time, the nickel scrap order was amended to bring it into conformity with the steel scrap segregation order.

A priorities rating of A-1-J will hereafter be applied to deliveries of materials essential for repair and maintenance of railroad track, structures, signal and communications systems, cars and locomotives and other important operating equipment.

Emphasizing the nation's growing lumber shortage as a result of heavy military demands, Donald M. Nelson, War Production Board chairman, appointed a western log and lumber czar to boost West Coast production, and announced that skilled lumbermen in the area would be granted temporary selective service deferments. Frederick H. Brundage, on leave as associate regional United States forester in the sixth region, has been named western lumber administrator with "the full powers of the War Production Board to carry out such action programs as may be necessary in order to obtain the qualities and quantities of lumber required by the program." A management-labor advisory board from the western lumber industry will be named soon to assist Mr. Brundage.

OBITUARY

L. C. Kyte, 63, Arkansas Department of Highways engineer at Marianna, died July 2 after sustaining a heart attack en route to work.

Bernard H. Morrison, 54, Halifax, N. S., civil engineer, died June 20 at Halifax.

James S. Y. Tyson, 55, engineer of Wyndmoor, Pa., died June 26.

Samuel Hamburger, 62, senior engineer and assistant director of the bureau of bridges of New York City's department of public works, died recently. He had directed the reconstruction of the Williamsburg and Queensboro bridges and the building of the first trackless trolley line on Staten Island.

Clarence C. Shaw, 45, civil engineer with the Phillips Petroleum Co. at Kansas City, Kan., died recently.

Edmund J. Walsh, civil engineer of Ottawa, Ont., died June 29. He was 82. Mr. Walsh was formerly engineer in charge of the Trent Canal construction, and was one of the engineers in charge of building the Canadian Pacific Railroad.

Louis C. Edgar, 58, of Pittsburgh, assistant chief engineer for the Carnegie-Illinois Steel Co., died June 30. He was a past president of the Engineers Society of Western Pennsylvania.

Robert A. Allton, 50, former superintendent of the Columbus, Ohio, sewage disposal plant, and a nationally known sanitary engineer, died June 24 at Hudson.

Frank D. Paine, who developed and had been the only head of the general engineering department at Iowa State College, died June 30. He worked out the college's engineering placement system, and from 1914 until his death had acted in the capacity of a consulting engineer. From 1929 to 1931, Paine was the field engineer in charge of the industrial survey of Iowa.

D. L. Wheat, 64, of Tulsa, Okla., former water commissioner for that city, died July 2. He was at one time located at Bentonville, Ark., as county engineer for Benton County.

Alfred S. Woodward, 70, who served for 21 years as Multnomah County (Wash.) road supervisor, died July 2.

Alberto Smith y Miyares, 81, engineer of Caracas, Venezuela, died there June 27. Mr. Smith had been active in early construction of Venezuelan railways.

Ralph Carl Ham, partner in the architectural firm of Green, Blankstein, Russell and Ham, of Winnipeg, Man., died June 26. He was 40. Mr. Ham recently was appointed technical adviser to the Dominion Department of Finance in connection with wartime housing.

Jes Jessen Dall, Jr., 47, building contractor of Ithaca, N. Y., died June 28 near Tampa, Fla.

Roland Usher Goodwin, 84, retired building contractor of Dover, N. H., died June 30 at St. Petersburg, Fla.

Christopher A. Nootz, 59, general contractor at Lincoln, Neb., died recently.

Access road fund increased by $110,000,000

Congress last week passed and sent to the President legislation amending the Defense Highway Act of 1941 to authorize an additional $110,000,000 for access roads.

Interesting feature of the amendment is the earmarking of $10,000,000 for access roads to reach sources of raw materials. This provision will aid development of sources hitherto known but undeveloped, or permit re-opening of sources still able to produce but abandoned long since because the costs of operation under normal conditions would be economically unfavorable.

Most of the remaining funds will be taken by PRA projects now set up.

CONTRACTS AND CAPITAL

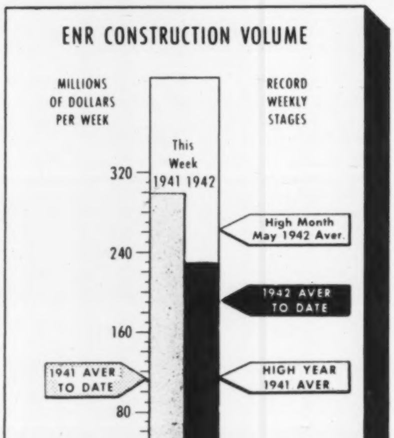
Engineering construction awards for the week total $401,603,000; the second highest weekly value ever reported. It is also the second highest week of the year. The all-time record to date, $434,955,000, was established in the week of May 7 of this year.

This week's total is 84½ percent above the preceding week's total and 34 percent above the corresponding high week of 1941 which totalled $298,718,000.

Public construction at $393,366,000 is 99 percent above last week and 45 percent above the same week last year, while private construction is 40 percent and 71 percent lower for the same weeks.

Federal construction continues at its high level and is 111 percent above last week and 59 percent above a year ago.

The current week's high value brings the total for the year to $5,524,720,000, a gain of 72 percent over the same period last year. Federal construction to date shows a gain of 180 percent over 1941.



Public buildings and unclassified construction are mainly responsible for the week's high total, while gains are also recorded in waterworks and sewerage construction. Subtotals for the week in each class of construction are: waterworks, $7,235,000; sewerage, $3.682.000; bridges, $669,000; industrial buildings, $868,000; commercial buildings and large-scale housing, $6,874,000; public buildings, $299,023,000; streets and roads, $9,994,000; earthwork and drainage, $2,246,000.

CONTRACTS

(Thousands of dollars)

	Week Ending		
	July 10 1941	July 2 1942	July 9 1942
Federal	$242,368	$183,766	$385,095
State & Municipal	28,707	13,804	8,271
Total public..	$271,075	$197,580	$393,366
Total private.	27,643	20,243	8,237
TOTALS	$298,718	$217,823	$401,603

Cumulative

1942......(28 weeks).....$5,524,720

1941......(28 weeks).....$3,214,330

Note: Minimum size projects included are: Waterworks and waterways projects, $15,000; other public works, $25,000; industrial buildings, $40,000; other buildings, $150,000.

NEW PRODUCTIVE CAPITAL

	Cumulative	
	1941 28 weeks	1942 28 weeks
NON-FEDERAL ...	$790.371	$518,842
Corp. Securities..	277.590	150,959
State & Mun.....	283,008	157,764
U.S.H.A. loans...	30,399	....
R.E.A. loans.....	500	....
R.F.C. loans.....	35,874	127,419
Fed.-Aid—Highways	163,000	82,700
FEDERAL	$4,127,389	$7,281,776
TOTAL CAPITAL..	$4,917,760	$7,800,618

ENR INDEX NUMBERS

Index Base = 100		1913	1926
Construction Cost..	July '42..	277.65	133.46
Building Cost......	July '42..	223.45	120.79
Volume	June '42..	752	330

FHA MORTGAGES

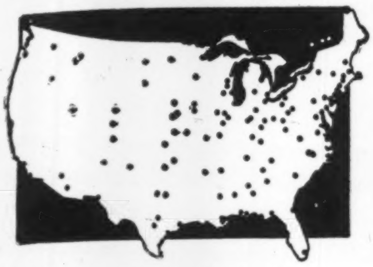
	Week Ending		
	July 4 1941	June 27 1942	July 4 1942
Selected for appraisal			
Title II....	$24,078	$5,848	$5,286*
Title VI....	$ 3,611	$14,527	$11,615*

* Subject to revision.

CONSTRUCTION REPORTS

Compiled by Business News Department—Engineering News-Record, 330 W. 42nd St., New York
ELSIE EAVES, Manager *SCOTT McLEOD, Statistician*
(Daily service also available—Write for details)

Location of ENR Correspondents



Symbols and Abbreviations Include

†	Federal Government
★	Project of $500,000 or over
ENR	Engineering News-Record
CD	Engineering News-Record Construction Daily
A-E-M	Architect — Engineer-Management type of contract.

Projects—By Size

Construction projects here reported cover the United States and Canada, are of these minimum sizes or larger: water supply, earthwork, waterworks, $15,000; other public works, $25,000; industrial buildings, $40,000; other buildings $150,000.

Classes of Construction

(Named in order of Listing)

Water Supply
Sewers, Waste Disposal
Bridges, Grade Cross'gs
Streets & Roads
Earthwork, Waterways
Unclassified
Latin America
Public Buildings
Commercial Buildings
Industrial Buildings

Stages Reported

PROPOSED: (except Streets & Roads):

BIDS ASKED (new announcements only. For full calendar, see also preceding issues of ENR);

LOW BIDDERS: On jobs below $500,000 value all low bidder news will be the final reports published on the projects involved except where award is not made to the low bidder. In this case, a supplementary contract award report will be published.

CONTRACTS AWARDED: Except awards to low bidders previously reported in low bidder stage.

Dates shown are of issue in which last previous report was published.

Note: To comply with censorship requirements, addresses on some reports are being generalized. Data which would reveal the purpose of the improvements and the size are withheld. The name of contractor and general area are reported.

WATER SUPPLY

PROPOSED WORK

†Calif., Sausalita—Federal Works Agency, 408 S. Spring St., **Los Angeles**, rejected bids June 11, two 200,000 gal. wood stave tanks for water sys. extens., Docket Calif. 4-242. CD 6/16—ENR 6/18, under LB.

Conn., Hartford—City, Metropolitan Dist., Water Bureau, reservoir, clearing shore line to raise elevation reservoir to 537 ft. above sea level, Barkhamsted. Over $15,000. C. Saville, 1026 Main St., engr.

Ind., New Castle—Bd. Pub. Wks., City Hall, S. J. Bufkin, chn., waterworks imprvs. $25,000-$35,000.

Ia., Hedrick—W. R. Hedges, city clk., deep well, water storage facilities. $20,000.

Ia., Tipton—Waterworks imprvs., facilities. $25,000.

†Me., Portland — Portland Water Dist., more than 7 mi, cement asbestos and c.i. watermains, approx. 4 mi. of which will be submarine mains, in harbor. **FWA.**

Mass., New Bedford—City, Water Dpt., 312 Municipal Bldg., elevated steel water tank, golf course. $45,000.

Mich., Garden City—WW exten., distr. mains. $50,000. Gen. Jerome & Co., 1850 Natl. Bank Bldg., Detroit, engrs.

†Mo., Lebanon—City, W. E. Kerr, mayor, bids soon, WW imprvs., water distr. sys., etc. $291,000. **FWA.** Russell & Axon, Inc., 2903 Delmar Blvd., St. Louis, engrs.

N. Y., Brooklyn—New York Water Service Corp., 2015 Church Ave., 1 story control house for operation wells and pumps, 528-36 New York Ave. $25,000. T. H. Wiggin, 90 Broad St., New York, engr.

N. Y., Jamestown — West Ellicott Water Dist., c/o Ellicott Town Bd., Community Bldg., Falconer, imprvs., exten., etc., Harding Heights water supply sys. $15,000. W. S. Lozier, 10 Gibbs St., Rochester, engr.

†N. Y., Kenmore (br. Buffalo P. O.)—Federal Works Agency, Wash., D. C., 1600 ft. watermain, booster pump station. $36,000. A. D. Drake, City Hall, Buffalo, dir. Water.

★**N. C., Wilmington**—Voted $600,000 bonds, water line to eliminate salt water infiltration in municipal water supply; new main will be constructed 20 mi. up Cape Fear River from here. J. A. Loughlin, city engr. CD 5/18—ENR 5/21.

O., Bucyrus—Replacing wooden mains with c.i. mains. Over $50,000.

Tenn., Nashville—1,300 ft. 2 in. watermains. F. Beasley, city engr.

†Tex., Abilene—Town, W. Hair, mayor, WW sys. imprvs., exten. $24,900. **FWA.**

Wis., Baraboo—Bids soon, imprv. water plant, etc. $16,500.

Que., Chicoutimi—Dominion Govt., Ottawa, Ont., water supply sys. exten. $30,000. Dpt. Munitions & Supply, Ottawa, Ont., engrs.

BIDS ASKED

Bids Asked July 16

†N. H., Portsmouth—Fed. Works Agency, 120 Boylston St., Boston, Mass., pre-stressed concrete standpipe. $18,500.

Bids Asked July 17

†Tex., Bay City—S. E. Doughtie, mayor, WW imprvs., Tex. 41-418. $130,000. **FWA.** Hedrick & Lindsley, 818 Southern Standard Bldg., Houston, engrs. and archts. CD 6/15—ENR 6/18.

Bids Asked July 20

S. D., Yankton—Anna M. Goetz, city aud., rein.-con. reservoir. $20,000. H. J. Steckler, water supt.

LOW BIDDERS

†D. C., Wash.—U. S. Eng., 1 and Douglas Sts. N.W., Wash., D. C., June 30, filters, sub-station addn. at Dalecarlia Filtration Plant, Inv. 977-42-264, from George C. Martin, 4 and Butternut Sts. N.W., Wash., D. C. **$102,500.** CD 6/23—ENR 5/25.

Ill., Chicago—Dpt. P. Wks., June 29, chemical bldg., rein.-con., South Dist. Filtration Plant, from Michuda Bros. Constr. Co., 11351 S. Michigan Ave. **$352,670.** CD 6/16—ENR 6/18.

N. H., Claremont — Town, Bd. Selectmen, Town Hall, June 30, earth dam, relocation of highway, reservoir, from D. M. Bernardi, Inc., 468 Washington St., Wellesley. **$78,400.** CD 6/23—ENR 6/25.

†Tex., Galveston—B. Harris, mayor, June 25, WW, Contr. 1, Tex. 41-33 from Zempter Contg. Co., 2115 Church St. **$104,333.**

CONTRACTS AWARDED

†Ariz., Flagstaff—U. S. Eng., Albuquerque, N. M., water storage sys., to Fisher Constr. Co., S. 19 Ave., Phoenix. **$166,000.** Bids after 4/20, awarded 6/26. CD 4/14—ENR 4/16.

★**†Arkansas**—U. S. Eng., Gay Bldg., Little Rock, water and sewerage sys., to Midwest Contg. Co., Sioux City, Ia. Est. **$1,000,000.** Awarded 7/3.

†California—U. S. Eng., 751 S. Figueroa St., Los Angeles, water and gas distr. sys., No. 579, to F. W. Weber, 540 W. 3 St., Downey. Awarded 6/29.

†Connecticut—U. S. Eng., 819 Industrial Trust Bldg., Providence, R. I., water sys., sewers, to A. Piatelli & R. Zoppo, 56 Rockdale St., Mattapan, Mass. Est. **$50,000.**

★**†Kansas**—U. S. Eng., 1709 Jackson St., Omaha, Neb., wells, to Layne-Western Co., 1010 W. 39 St., Kansas City, Mo. Total est. over **$5,000,000.**

†North Carolina—U. S. Eng., Maxton, water distr. sys., to Boyd & Goforth, Inc., 617 N. Smith St., Charlotte. Bids 6/20.

†Texas—U. S. Eng., Fort Sam Houston, water lines, facilities, sanitary storm sewers, Spec. 42-134, to T. S. Armstrong & J. L. Webb, Abilene. **$47,600** and **$117,000** respectively. Bids 6/30. CD 6/25.

†Tex., San Antonio—City, 10 in. c.i. watermain force account. **$27,500. FWA.**

†Va., Norfolk—At office W. H. Taylor III, dir. P. Wks., earthbound concrete spillway, Burnt Mills drainage area, near here, in connection with WW sys. addn., Docket VA. 44-101, to Liberty Contg. Co., Rothesay Rd. and Belt Line, Richmond. **$303,820. FWA.** CD 6/17—ENR 6/25, under LB.

Ont., Pendleton—Dominion Govt., Ottawa, Ont., concrete reservoir, pump. sta., water pressure storage tanks, to **A. W. Kelly**, Hawkesbury. **$52,000.** Dpt. Munitions & Supply, Ottawa, engrs.

Que., Ancienne Lorette—Council of Ancienne Lorette, repairing municipal aqueduct, to L. Robitalille, Notre Dame St., **$40,000.** CD 9/4

SEWERS, WASTE DISPOSAL

PROPOSED WORK

Ia., Davenport—F. A. Hass, city clk., exten. main sewers $30,609, district main sewer $17,070, lateral sewers $32,680.

Ia., Davenport—F. Hass, city clk., sewerage sys., Sunnymead addn. $75,000.

★**Mich., Garden City**—Sewerage sys. $740,910. Geo. Jerome & Co., 1850 Natl. Bank Bldg., Detroit, engrs.

†Miss., Centerville—Sewerage sys. exten.

†New Jersey—Industrial Co., brick sewage disposal plant, etc. Federally financed. Albert Kahn Assoc., Inc., 345 New Center Bldg., Detroit, Mich., archts. and engrs.

N. J., East Orange—Sewers various streets, $60,500, WPA. C. Malstrom, Orange and N. 6 Sts., Newark, WPA engr.

†Texas—U. S. Eng., Fort Sam Houston, did not open bids June 29, installing 21,000 lin. ft. 18- to 42-in. precast and 13,000 lin. ft. 48- to 66-in. monolithic concrete storm sewer pipe, catch basins, etc., Spec. 42-114. $70,000 Project indefinitely postponed. CD 6/23.

†Wyoming—U. S. Eng., 1709 Jackson St., Omaha, Neb., sewage disposal plant. Toltz, King & Day, Inc., 1509 Pioneer Bldg., St Paul, Minn., archts. and engrs. CD 5/14—ENR 5/7.

BIDS ASKED

Bids Asked July 16

N. Y., New York—President Bronx Boro, Bronx County Bldg., 851 Grand Concourse, sewer, appurtenances, Pratt and Lacombe Aves.

Bids Asked July 17

†Tex., Bay City—City, c/o S. E. Doughtie, mayor, sewerage sys. extens., mains, laterals, etc., Tex. 41-414. **FWA.** Extended date. Hedrick & Lindsley, 818 Southern Standard Bldg., Houston, engrs. and archts. CD 6/15—ENR 6/18.

Bids Asked About July 26

O., North Canton—L. Braucher, village clk., storm water sewers. $25,000.

LOW BIDDERS

†Alabama—U. S. Eng., Bynum, June 29, sewage disposal plant, pump. station; from W. L. Coston Constr. Co., Bessemer.

Colo., Denver—City and County of Denver, July 2, sewage treatment plant, from Harvey Stenmark Co., 821 Humboldt St. **$209,143.** Est. $125,000. CD 6/18—ENR 6/25.

†Calif., Vallejo—Federal Works Agency, 408 S. Spring St., June 29, main outfall sewer, Docket Calif. 4-452, Unit 1, Cont. 1, from W. J. Tobin, 5708 Glenbrook Dr., Oakland. **$39,074.**

Conn., Middletown—S. C. Cannon, supt. P. Bldgs., City Hall, June 29, sewage disposal plant, appurtenances, off River Rd., from Angelo Tomasso, Inc., 101 Stanley St., New Britain. **$42,939.** Est. $30,000. CD 6/24—ENR 4/30.

†Nevada—U. S. Eng., June 29, sewage plant exten., Inv. 586, from F. B. Ryan, 6518 Beck Ave., North Hollywood, Calif. **$94,451.**

CONTRACTS AWARDED

†Arizona—U. S. Eng., 751 S. Figueroa St., Los Angeles, Calif., outfall sewerage sys., to R. A. Wattson Co., 1026 N. McCadden Pl., Los Angeles, Calif.

†Ariz., Flagstaff—U. S. Eng., Albuquerque, N. M., sewage disposal plant, incinerator, storm sewers, service line, chlorinating, etc., SEWERS, etc. (Contracts Awarded, Cont'd.)

to C. E. Kerns, Los Angeles. **$240,000.** Bids after 4/16. Awarded 6/26. CD 4/14—ENR 4/16.

★**†Arkansas**—U. S. Eng., Gay Bldg., Little Rock, sewerage sys., Bids 7/8, CD 6/29—ENR 7/2 and electrical distr. sys., Bids 7/4, ENR 6/29, to Geo. Cassidy & Sons, 130 N. Wells St., Chicago, Ill; roads, streets, etc., to A. J. Spicer, 1706 Camden Way, Oklahoma City, Okla., est. **$1,000,000.** Awarded 7/3.

†Fla., Orlando—City, incinerator, to J. E. Kelley. **$157,250.** FWA.

★**†Illinois**—U. S. Eng., 800 Courthouse & Customhouse, St. Louis, Mo., sewer and water lines, to G. L. Tarlton Contractor, Inc., 3615 Olive St., St. Louis, Mo., and MacDonald Constr. Co., 3829 W. Pine Blvd., St. Louis, Mo. Est. less than **$1,000,000.**

Ill., Chicago—Sanitary Dist. of Chicago, J. M. Whalen, chn. Finance Comn., 910 S. Michigan Ave., West-Southwest Sewage Treatment Works, Div. LE, to C. Ottenhoff, 1220 S. Leavitt St. **$98,080.** Bids 5/28. Rejected bids 5/28, Sect. LD, installing 25,800 ft. 16 and 10 in. pipe, fittings. CD 6/2—ENR 6/4, under LB.

†Mississippi—U. S. Eng., Courthouse, Mobile, Ala., sewage treatment plant exten., Inv., 569-42-772, to Capitol Const. Co., 157 Cain St. N.W., Atlanta, Ga. Bids 6/26.

†Nevada—Federal Works Agency, 408 S. Spring St., Los Angeles, Calif., laterals, Docket Nev. 26-116, Schedule 2, to Bebek & Brkich, 238 Florence Ave., Los Angeles, Calif., and Sutalo & Ramljak, 476 Camulos St., Los Angeles. **$479,636.** Bids 7/1. CD 7/6, under LB—ENR 5/7.

†North Carolina—U. S. Eng., Maxton, sewers, to Boyle Constr. Co., Sumter, S. C., and A. H. Guion, Wilkinson Blvd., Charlotte. Bids 6/25.

†Okla., Muskogee—R. Tuckert, city mgr., sewerage sys. exten., imprvs., to Oscar Drake, Muskogee. **$110,000. FWA.** Bids 6/22. CD 6/4—ENR 6/11.

†Texas—U. S. Eng., Fort Sam Houston, sewers, natural gas distr. lines, facilities, water distr. lines, facilities, Spec. A-2-13, to Truehart, Caldwell & Lee, Builders Exchange Bldg., San Antonio. **$77,480.**

Ont., Sault Ste. Marie—Municipality, sewer exten., day labor. **$25,000.** CD 3/10—ENR 3/12.

Que., Joliette—Municipality, c/o C. Bonin, clk., sewer exten., day labor. **$25,000.** E. H. Lippe, Town Hall, engr.

BRIDGES, GRADE CROSSINGS

PROPOSED WORK

N. J., Elizabeth—Central R.R. of New Jersey, A. E. Owen, ch. engr., Reading Terminal, Phila., Pa., repairing bridge Madison Ave.

N. B., St. George—Province of New Brunswick, Fredericton, New River Mills bridge. $30,000.

BIDS ASKED

Bids Asked July 14

Iowa—State Hy. Comn., Ames, culvert construction on U. S. 30, Project FN-328-A, Boone Co.; 1 rein.-con. box culvert exten. and flume on U. S. 34, Project FN-15, Mills Co.; rein.-con. culvert exten., flumes, on U. S. 6 and Iowa 64, Project FN-312, FN-310, FN-309 and P. 576, Pottawatamie Co. F. R. White, Ames, ch. engr.

Bids Asked July 16

Florida—State Rd. Dpt., Tallahassee, fourteen 15 ft. timber span bridge over Black Creek, Rd. 12, Liberty Co.; bridges over Teatable Key Relief Channel, Snake Creek, and Tavernier Creek, Rd. 4-A, FAP SN-U-FAS 78-B(1), Monroe Co. J. H. Dowling, state hy. engr.

Bids Asked July 22

California—State Div. Hys., Sacramento, repairing bridge, constr. pier fenders at Paintersville, across the Sacramento River, Sacramento Co. Over $25,000.

Bids Asked July 23

California—State Div. Hys., Sacramento, timber, concrete structural steel bridge across Noat Channel in San Diego City, San Diego Co., over $25,000; timber bridge across Los Cerritos Channel, 6 mi. east of Long Beach, Los Angeles Co.

LOW BIDDERS

California—State Div. Hys., Sacramento, July 1, 2 culverts, 2 bridges, 0.009 mi. roadway, Humboldt and Siskiyou Counties, from E. E. Smith, 1636 B St., Eureka. **$63,133.** CD 6/15—ENR 6/18.

Michigan—State Hy. Dpt., Lansing, June 24, grade separation, Detroit Industrial Expressway, Monroe Rd., Wayne Co., from D. T. Frank, 542 Evergreen Ave., East Lansing, **$122,712**; on Telegraph Rd., from J. W. Hertel, 1138 Fisk St., Grand Rapids, **$211,761.** CD 6/17.

CONTRACTS AWARDED

Oregon—State Hy. Comn., Portland, repairing Dillard Hy. Bridge across Umpqua River, south of Roseburg, Douglas Co., own forces. Est. **$50,000.** R. H. Baldrock, State House, Salem, state engr. CD 6/30—ENR 7/2.

Pa., Allentown—E. W. Meckley, city engr., rebuilding Klines Island Bridge, to Whittaker & Diehl, Calder Bldg., Harrisburg. **$25,597.** Est. $30,000. Awarded 7/1.

STREETS AND ROADS

BIDS ASKED

Bids Asked July 13

Ia., Hawarden—E. Ericson, city clk., resurfacing 33,000 sq. yd. streets. $25,000.

Bids Asked July 14

Iowa—State Hy. Comn., Ames., concrete paving, etc. 0.055 mi. U.S. 30, Proj. FN-18, Clinton Co.; second course gravel surfacing 0.721 mi. Iowa 136, Proj. FN-378-H; 8.04 mi. Iowa 136, Proj. FN-841-A(1), both Dubuque Co.; 7.642 mi. Iowa 136, Project 814-A(1), Jones Co.; 0.719 mi. channel change along north side of Iowa 184, from West Nischnabotna River, westerly, Proj. FN-864-A(1), Fremont Co.; concrete paving, incidental work 0.053 mi. Dodge St. adjoining Mississippi River bridge project, Dubuque, U.S. 20, Proj. FN-305, Dubuque Co.; maintenance resurfacing, incl. gravel surfacing 11.6 mi. Iowa 141 from Woodward to Granger and from Guthrie Co. to end of pavement; 0.7 mi. Iowa 335 from Dawson to Iowa 141 mi., 0.9 mi. Iowa 293 from Van Meter to Iowa 90, 8.4 mi. U.S. 169 from Madison Co. to Adel, 3.8 mi. Iowa 232, from Earlham to Iowa 90, 3. mi. Iowa 292 from Lindon to Iowa 64, involving 4,115 cu. yd. gravel surfacing on road; Project M-237, Dallas Co.; 13.4 mi. Iowa 50 from Callender to Lehigh, 0.5 mi. Iowa 121 from Dolliver Park to Iowa 50, 4 mi. Iowa 144 from Greene Co. to Iowa 175, 6 mi. Iowa 321 from Claire to Iowa 5, Proj. M-1238, Webster Co.; gravel surfacing 15 mi. Iowa 31, Proj. M-3260, Woodbury Co. F. R. White, Ames, ch. engr.

N. J., Columbia—Pahaquarry Twp., Columbia Hotel, 15,440 sq. yd. gravel or shale surfacing, 16,928 cu. yd. excav. River Rd., Sect. 7. H. W. Vetter, Belvidere, engr.

Bids Asked July 15

Parish.

Louisiana—Dpt. Hys., Baton Rouge, 3,810 cu. yd. washed gravel, S.P. No. 901-01-17, St. James Parish; 8,700 cu. yd. washed gravel, S.P. No. 301-01-06, for roads West Weliciana

Bids Asked July 16

Florida—State Rds. Dpt., Tallahassee, bituminous road mix paving 0.878 mi. Rd. 341, Operating No. 5529, Escambia Co.; sand clay base, surface treating 1.029 mi. Rd. 341, Santa Rosa Co.

Bids Asked July 17

†Virginia—Pub. Roads Admin., 515 14 St. N.W., Wash., D. C., paving 23 War Dept. Bldg. Road network, Proj. VA-DA-WR-8.

Wisconsin—State Hy. Comn., Madison, concrete surfacing 9.693 mi. Madison-Milwaukee Rd., Johnson Creek-East County Line Rd., FAP SN-FAP 467-D(1), State Trunk Hy. 30, Contr. 1, Jefferson Co.; 0.852 mi. Winona-Marshland Rd., Winona Interstate Bridge approach, F.A.P. 340-A(4) and S. Proj. 5709, State Trunk Hys. 35 and 54, Contr. 1, Buffalo Co.

Bids Asked July 22

Louisiana—Dpt. Hys., Baton Rouge, concrete paving, rein.-con. multiple box culverts 0.125 mi. Houma-Raceland Hy., SP 5-05-13, FAP 60 (2), Terrebone Parish; rein.-con. box culvert, concrete paving approaches 0.021 mi. Bayou Blue Bridge on Elton-Kinder Hy., State Route 7, Jefferson Davis Parish. W. Prescott Foster, dir.

Bids Asked July 24

Minnesota—State Hy. Dpt., St. Paul, concrete paving 3.5 mi. S.P. 6216-02, TH 51-125, AI FAP 920 A (1); 2.2 mi. Project 27-516-01 and 62-511-0, Hennepin and Ramsey Counties; crushed rock surfacing 7.5 mi. S.P. 5506-07, TH 42-42 and S.P. 7901-20, TH 42-42. Plans deposit $3.25, for 1st, $1.25 for 2nd and 35c. for latter projects. J. T. Ellison, ch. engr.

Bids Asked July 30

†O., Toledo—Pub. Bldgs. Admin., C St. between 18 and 19 Sts. N.W., Wash., D. C., driveway exten. at post office (old) Madison Ave. and St. Clair St.

Bids Asked July 31

†New York—Pub. Bldgs. Admin., District Engr., 731 Custom House, New York, concrete road, etc.

Bids Asked July 22

California—State Div. Hys., Sacramento, concrete widening 5.9 mi. roads between Fort Tejon and 1.04 mi. north of Grapevine Station, Kern Co. Over $25,000.

Bids Asked

Ala., Mobile—Comrs. Mobile Co., inverted penetration type and plant mix seal surfacing 1.7 mi. Fulton Rd. CD 5/19.

Arkansas—Arkansas Power & Light Co., Pine Bluff, access and communication roads and railroad spur running into generating plant.

California—C. H. Purcell, engr. State Hy. Dpt., Sacramento, rejected bids May 27, imprv. 10.9 mi. Humboldt Co. Will readvertise. CD 6/1—ENR 6/4, under LB.

Connecticut—State Hy. Dpt., Hartford, rejected bids imprv. hys. in Meriden, Hebron and Lyme. CD 6/10—ENR 6/18.

Ohio—State Hy. Dpt., Columbus, received no bids June 30, grading, drainage structures, concrete pavement, roadside imprvs. 813 mi. Sects. P and D of SH 86 and Sect. D of SH 89, Columbiana Co. $135,600.

†Texas—U. S. Eng., Federal Bldg., Galveston, indefinitely postponed bids to have been opened June 26, street asphalt pavement and drainage facilities (4th proj.) (P Air/J), $160,000.

LOW BIDDERS

Alabama—W. G. Pruett, state hy. dir., Montgomery, June 26, imprv. 9.08 mi. Barbour Co., from Vandigriff Constr. Co., 1708 N. Court St., Montgomery, **$44,080;** 1.941 mi. Madison Co., from Mitchell Bros. Constr. Co., 3828 1 Ave. S., Birmingham, **$75,956.** CD 6/19.

California—State Div. Hys., Sacramento, July 1, imprv. 2 mi. Merced Co., from E. A. Forde, 640 San Francis Drake Blvd., San Anselmo. **$50,439.** Received no bids July 1, imprv. 4.7 mi. Kings Co. CD 6/15—ENR 6/18.

†D. C., Wash.—Office Dist. Eng., Pub. Roads Admin., Winder Bldg., F and 17 Sts. N.W., June 27, Project DA WR-8, Riprap 2, War Dpt. Bldg., road network, from Diamond Constr. Co., 2801 8 St. N.E. **$314,750.** CD 6/16—ENR 6/18.

★**Michigan**—State Hy. Dpt., Lansing, June 24, imprv. 2.271 mi Detroit Industrial Expressways, from Inkster to Jim Daly Rds., Wayne Co., from Louis Garavaglia & Son, 4514 Burns Ave., Detroit, **$549,935*****2.159 mi. from Middle Belt to Inkster Rds., from Julius Porath & Son Co., 702 Transportation Bldg., Detroit, **$421,874** *** 1.943 mi. Telegraph to Monroe Rds., from Chas. J. Rogers, Inc., 14651 Forrer Ave., Detroit, **$469,144*****0.833 mi. Monroe Blvd. to Pelham Rd., from Taylor Bros. Co., Inc., 790 Haynes St., Birmingham, **$132,041*****2.762 mi. north and south lanes, from Loselle Constr. Co., 308 Antonie St., Wyandotte, **$249,237*****1.444 mi. Wayne and Washtenaw Counties, from Lewis & Frisinger Co., 214 E. Madison Ave., Ann Arbor, **$304,680.** CD 6/17.

★**Pennsylvania**—State Hy. Dpt., I. L. Hughes, secy., Harrisburg, June 30, imprv. 39,550 ft. Adams Co., from J. H. Swanger, Breneman Bldg., Lancaster, **$1,622,222,** est. over $500,000***19,083 ft. Washington Co., from Harrison Constr. Co., 1101 Western Ave., Pittsburgh, **$657,343,** est. over $500,000***5,950 ft. Erie Co., from Chas. H. Frey Constr. Co., 1902 Cherry St., Erie, **$210,954,** est. over $25,000***3,701 ft. Delaware Co., from James J. Skelly Co., Media, **$109,604,** est. over $25,000***2,071 ft. Philadelphia Co., from F. R. Curtis, State Rd. and Unruh St., Phila., **$120,292,** est. over $25,000***0.91 mi. Essington Ave., Philadelphia, Philadelphia Co., from Louis Dolente & Sons, 5122 Master St., Phila., **$142,825.** Received no bids June 30, imprv. 618 ft. Beaver Co. Will readvertise. CD 6/23—ENR 6/25.

†Tex., Orange—A. Sokolski, mayor, June 29, access road Tex. 41-228, from Chas. Cohan, Orange. **$81,370. FWA.** CD 6/15—ENR 6/18.

Wisconsin—State Hy. Comn., Madison, June 30, imprv. 3.219 mi. Pepin Co., from Ed. Kraemer & Sons, Plain, **$34,509.** CD 6/17—ENR 6/25.

CONTRACTS AWARDED

†Alabama—U. S. Eng., Courthouse, Mobile, roads, utilities, Inv. 569-42-696, to J. B. Owens Constr Co., 4011-1 Ave. N., Birmingham. Bids 6/26.

†California—U. S. Eng., 751 S. Figueroa St., Los Angeles, roads, driveways, parking areas, etc., No. 583, to MacDonald & Kahn, 200 Financial Center Bldg., San Francisco. Awarded 6/29.

†Colorado—U. S. Eng., c/o Postmaster, Denver, highway relocation, to Lowdermilk Bros., 140 S. Elati St., Denver***bridges, to Larson Constr. Co., 2811 Walnut St., Denver***grading, to M. R. Deakin, Denver.

†Colorado—U. S. Eng., Albuquerque, N. M., roads, drainage, to Midwest Const. & Asphalt Co., 221 N. La Salle St., Chicago, Ill.

★**†Florida**—U. S. Eng., Courthouse & Postoffice, Jacksonville, walks, Inv. 436-42, to H. C. Sullivan, Frostproof, bldgs., to Watt & Sinclair, 207 Royal Palm Way, Palm Beach, ea. contract less than **$1,000,000.**

★**†Florida**—U. S. Eng., Courthouse & Postoffice, Jacksonville, roads, Inv. 436-42, and parking areas, to B. B. McCormick and Sons, Graham Bldg., Jacksonville, less than **$1,000,000** ea. Awarded 6/28 and 6/27 respectively.

★**†Florida**—U. S. Eng., Courthouse and Postoffice, Jacksonville, roads, to Marion Contg. Co., Ocala, less than **$1,000,000.** Awarded 6/30. CD 6/16—ENR 6/18.

Mass., Quincy—Bethlehem Steel Co., E. Howard St., roads, drainage sys. and dike, STREETS, etc. (Contracts Awarded, Cont'd.)

Fore River plant, to B. Weston, 116 Rockland St., Hingham. Over **$25,000.**

Miss., Columbus—Paving 8 Aves. and 4 St. WPA. **$87,629.**

N. J., North Bergen—Town, Town Hall, grading, bituminous surfacing, concrete curbs, walks. WPA. **$65,000.** C. Malstrom, Orange and N. 6 Sts., Newark, WPA engr.

†New Mexico—U. S. Eng., Albuquerque, grading, paving, stabilizing base course, to Allison-Armstrong-Thygeson, Roswell. **$124,000.** Bids about 5/21. CD 5/18.

North Dakota—State Hy. Dpt., Bismarck, imprv. 24.6 mi. Dickey and La Moure Counties, to Northern Imprvt. Co., Fargo. Bids 6/19.

★**Ohio**—State Hy. Dpt., Columbus, imprv. 2.005 mi. Cuyahaga Co., to W. L. Schloss, Bway. and McCracken Rd., Cleveland, **$15,268,** est. $45,000***6.821 mi. Delaware and Morrow Counties and 7.131 mi. Union, Delaware and Marion Counties, to L. L. Clymer, West Jefferson, **$59,002** and **$56,158** respectively, est. $65,000 and $58,000 respectively***5.918 mi. Lake Co., to Cuyahoga Asphalt Paving Co., 13125 Shaker Square, Cleveland, **$31,396,** est. $31,500***3.689 mi. Medina Co., to Ohio Road Imprvt. Co., Chamber of Commerce Bldg., Cleveland, **$39,260,** est. $39,470***8.416 mi. Mercer and Auglaiz Counties, to L. P. Cavett Co., 511 Shepherd Ave., Lockland, and, 33.87 mi. Shelby, Auglaize, Mercer and Champaign Counties **$86,926** and **$55,353** respectively est. $92,100 and $57,109 respectively***4.283 mi. Seneca Co., to Mansfield Asphalt Co., 131 Orange St., Mansfield, **$70,620,** est. $71,000***0.812 mi. Vinton Co., to Orndoff & Orndoff, Box 114, Waterford, **$37,566,** est. $37,800***25.73 mi. Logan, Clark and Champaign Counties, to Bowsnam Washed Sand & Gravel Co., Box 596, Troy, **$42,287,** est. $42,318***15.15 mi. Medina and Wayne Counties, to A. J. Ronyak, R. F. D. 2, Burton, **$35,304** est. $35,711. Grand total $559,143. Bids 6/30. CD 6/23.

O., Cleveland—Bd. Comrs. Cuyahoga Co., G. H. Stahler, clk., asphaltic resurfacing Turney Rd., to W. L. Schloss, McCracken and Penn Rds., Bedford. **$42,431.** Bids 6/23, awarded 6/26. CD 6/10—ENR 6/18.

O., Youngstown—Mahoning Co., resurfacing roads, to Kelley & Meyer Co., Dollar Bank Bldg., **$116,421.** Est. $118,028. Bids 6/25, awarded 6/26. CD 6/16—ENR 6/18.

†Texas—U. S. Eng., Fort Sam Houston, asphalt paving 4½ mi. road, bridge alterations, rein.-con. low-water crossing, Spec. 42-132, to M. E. Ruby, Wallace & Bowden, Littlefield Bldg., Austin. **$96,300.** Est. $80,000. Bids 6/22.

Tex., Port Neches—Jefferson Co., c/o Judge, Beaumont, asphalt paving 3.1 mi. access road, to Russ-Mitchell, Inc., 2302 Jefferson St., Houston. **$109,665.** T. L. Kelly, Beaumont, engr.

Utah—State Road Comn., Salt Lake City, natural rock asphalt surfacing 2.473 mi. road between Layton and Hill Field, Sects. 1 and 2, to Reynolds-Ely Constr. Co., Springfield, **$25,903** and **$45,977** respectively, est. $22,942 and $32,772 respectively***Sect. 3, to Young & Smith, 1678 Browning Ave., Salt Lake City, **$40,034,** est. $29,251. Bids 6/19.

Quebec—Dpt. Roads, Quebec, imprv. roads, Beauce, Drummond and Athabaska Counties, to L. Bouchard, St. Georges de Beauce, **$31,200*****hys., Nicolet, Yamaska, Vandreuil, Soulanges, Bagot, Rouville, Jolliette, Assomption, Hull and Gatineau Dist., to Const. Rive Sud, Ltd., 1822 des Carriers St., Montreal, **$48,500*****roads, Chambly, Richelieu, Beauharnois, Chateauquay, Huntingdon, Latbiniere and Champlain, to Abias Pepin Ltd., 245 5 Ave. W., Longeueuil, **$53,100** *** roads, Laprairie, Napierville, St. Jean Iberville, Missiquoi, Brome and Shefford, to P. Bailbargeau, 264 Champlain St., St. Johns, **$42,000***** roads, Wolfe, Compton, Sherbrooke, Standstiad and Richmond, to National Paving & Const. Co., Ltd., 934 St. Catherine St. E., Montreal, **$33,700*****roads, Laval, Jacques-Cartier, Bellechasse, Levis, Portneuf, Quebec and Dorchester, to Provincial Const. Co. Ltd., 2750 Hill Park Rd., Montreal, **$50,200.** Grand total $258,700.

EARTHWORK, WATERWAYS

PROPOSED WORK

Iowa—State, Des Moines, dredging Lake Cornelia, Wright Co. $25,000 appropriated.

Ia., Storm Lake—State, Des Moines, dredging Storm Lake. $25,000 appropriated.

O., Cleveland—City, W. C. Reed, dir. P. Properties, bulkhead, jetties, and fill in behind same, various parks along Lake Erie. $200,000. S. Newman, City Hall, engr.

★**Tex., Rockland** — Lower Neches Valley Auth., c/o B. A. Steinhager, secy., c/o Comet Rice Mills, sponsors, Beaumont, postponed bids to have been opened July 10, dam on Neches River, near here. $2,000,000. J. B. Converse & Co., Inc., Port Arthur, engrs. Will probably take bids in fall. CD 6/2—ENR 6/4.

★**Que., Quebec City**—Province of Quebec, Quebec City, replacing wooden dam on Metis River $200,000; diverting part of Megiscane River, northwestern Quebec, for increased power development $800,000. Quebec Running Streams Comn., 7 Notre Dame St. E., Montreal, engrs.

BIDS ASKED

Bids Asked July 14

†Connecticut—U. S. Eng., 819 Industrial Trust Bldg., Providence, R. I., dredging.

Bids Asked July 22

La., Abbeville—City, Court House Bldg., dredging 500,000 cu. yd. excav. on 36 mi. existing canals.

LOW BIDDERS

†Louisiana—U. S. Eng., foot of Prytania St., New Orleans, June 24, 130,000 cu. yd. earthwork, 17,000 sq. yd. shell roadway surfacing, excavating, drainage, ditches, etc. in Charenton Intracoastal Canal Levee, Berwich Front, Inv. 1096-42-499, from Lower Coast Constr. Corp., 1100 S. Claiborne St., New Orleans. CD 6/2—ENR 6/4.

CONTRACTS AWARDED

★**†California**—U. S. Eng., 74 New Montgomery St., San Francisco, furnishing, placing of rock, to C. Dudley De Velbiss Co., Hotel Oakland, Oakland, under **$1,000,000.** Awarded 6/29.

Mass., Somerville (br. Boston)—Boston & Main R.R., 150 Causeway St., Boston, C. S. Robinson, asst. ch. engr., tide gate chamber, Mystic River. Owner builds.

†New Jersey—Ordinance Dpt., Raritan Arsenal, Raritan, soil erosion control by excavating, grading, planting 300 acres, **WPA. $90,000.** J. H. Weitzen, Chestnut and Hamilton Aves., Trenton, WPA engr.

N. J., Jersey City—Hudson Co., 5,600 ft. dikes also dredging creek. **WPA. $43,501.** C. Malstrom, Orange and N. 6 Sts., Newark, WPA engr.

N. S., Lloyd's Cove—Secy. Dpt. P. Wks., Ottawa, Ont., dredging, to Beacon Dredging Co., Ltd., Roy Bldg., Halifax. **$15,100.** CD 6/11/41—ENR 6/19/41.

Ont., Cobourg—Sec. Dpt. P. Wks., Ottawa, dredging Cobourg Harbor, to C. S. Boone Dredging & Const. Co., Ltd., 80 Richmond St. W., Toronto, **$22,800.** CD 5/20.

Ont., Toronto—Dpt. P. Wks., Ottawa, dredging Eastern Channel, Toronto Harbor, to McNamara Const. Co., Ltd., Industrial St., Leaside, **$16,400.** CD 5/18.

Que., Beloeil—Secy. Dpt. P. Wks., Ottawa, Ont., dredging, to Southern Working Ltd., 4895 Cartier St., Montreal, **$15,500.** Bids 5/15.

UNCLASSIFIED

PROPOSED WORK

Arkansas — TRACKAGE — Missouri Pacific Lines, F. E. Bates, ch. engr., Mo. Pacific Bldg., St. Louis, Mo., addnl. trackage, Texarkana, $58,200; North Little Rock, $174,100.

Ark., Blytheville—TRANSMISSION LINE—Arkansas-Missouri Power Co., Blytheville, 1 mi. 33,000 volt and 2.1 mi. 2,300 volt transmission lines.

Colorado — RURAL ELECTRIC LINES — Southeast Colorado Power Assn., E. G. Rash, mgr., constructing, rephasing rural electric lines. $35,000 REA allot.

★**†Florida**—IMPROVEMENTS—U. S. Eng., Courthouse, Mobile, Ala., imprvs. $3,000,000.

Idaho—RURAL ELECTRIC LINES—Kootenai Rural Electrification Assn., Inc., K. Lemley, supt., constructing, rephasing rural electric lines. $32,000 REA allot.

Ia., Anamosa—AIRPORT—City, E. Pulver, mayor, airport. $50,000.

Ia., Anamosa—TRANSMISSION LINES, etc.—Maquoketa Valley Rural Electric Co-operative, Anamosa, exten. transmission lines, imprv. plant. $32,000 REA allot.

★**†Missouri**—IMPROVEMENTS—U. S. Eng., P. O. Box 97, Memphis, Tenn., imprvs., bldgs., etc. Less than $10,000,000. Russell & Axon, Inc., 4903 Delmar Blvd., St. Louis, engrs., F. E. Wenger, Malden, project engr.

Missouri—RURAL ELECTRIC LINES—Central Missouri Electric Cooperative, Inc., Sedalia, W. F. Schieberl, supt., completing sect. rural electric sys. $25,000 REA allot.

Missouri — RURAL ELECTRIC LINES — Grundy Electric Co-operative, Inc., Trenton, 60 mi. rural electric lines. $118,000 REA allot.

Neb., Columbus—AIRPORT — $33,500 bond election Aug. 11, enlarging airport. $50,000. CD 4/10—ENR 4/17.

†North Dakota — IMPROVEMENTS — Civil Aeronautics Admin., 222 W. No. Bank St., Chicago, Ill., bids late this summer imprvs. CD 4/8—ENR 4/16.

Ohio—GAS PIPE LINE—East Ohio Gas Co., 1405 E. 6 St., Cleveland, 22 mi. natural gas pipe line from gas pools in Tuscarawas and Stark Counties to control station near North Canton. Over $25,000.

O., Cleveland — STORAGE TANKS — East Ohio Gas Co., 1405 E. 6 St., addnl. storage facilities, incl. inside and outside tanks, 76 ft. diam., 51 ft. high.

Okla., Clinton — AIRPORT — Voted bonds municipal airport. $125,000. D. T. Neill, Clinton, engr. CD 4/10—ENR 4/17.

Okla., Woodward—AIRPORT—Voted $29,500 bonds, airport. $150,000. CD 6/5—ENR 5/28.

South Dakota — POWER TRANSMISSION LINES—Northern States Power Co., 360 Wabasha St., St. Paul, Minn., relocating power transmission lines from Sioux Falls to Granite Falls. $25,000.

★**†Tennessee**—IMPROVEMENTS—U. S. Eng., P. O. Box 97, Memphis, imprvs. $3,000,000.

★**†Tennessee**—IMPROVEMENTS—U. S. Eng., 306 U. S. Courthouse, Nashville, imprvs. Over $3,000,000.

Texas — IMPROVEMENTS — Houston Shipbuilding Corp., Esperson Bldg., Houston, bid opening indefinitely postponed imprvs. Over $40,000. CD 6/18—ENR 6/25.

★**†Texas**—IMPROVEMENTS—U. S. Eng., 25 St. and Avenue F, Galveston, imprvs. Over $3,000,000.

Wisconsin — IMPROVEMENTS — Dr. J. H. Wallis & Associates, Rice Lake, imprvs.

N. B., Point de Chene—DOCK—Canadian Natl. R.R., 360 McGill St., Montreal, Que., dock facilities. $75,000.

Que., Sillery—PIPELINE—Les Petroles de Quebec, Inc., Sillery, pipeline on north shore, St. Lawrence River. $30,000.

BIDS ASKED

Bids Asked July 14

†Arkansas—IMPROVEMENTS—U. S. Eng., P. O. Box 97, Memphis, Tenn., imprvs., bldgs. CD 6/25—ENR 7/2, under CA.

Bids Asked July 21

N. Y., Sloatsburg — GRADING, etc. — Bd. Educ., Dist. 1, Town of Ramapo, grading, landscape work for school, Allen-Whitenour site.

Bids Asked

Me., Bath—PIER—Bath Iron Wks. Corp., 4 Union Rd., timber, rein-con. pier. A. J. Harriman, 53 Front St., engr.

Ont., London—HANGAR—Secy. Dpt. Munitions & Supply, Ottawa, addnl. hangar, Air Observer School, Crumlin Airport, for Dpt. National Defense for Air, Ottawa. $150,000.

LOW BIDDERS

★**†California**—IMPROVEMENTS—U. S. Eng., Wright Bldg., Sacramento, June 29, imprvs., Spec. 91, from Fredrickson & Watson Constr. Co., 873 81 Ave., Oakland, **$897,258.**

†Connecticut — SITE IMPROVEMENTS — Farm Security Admin., A. Kipp, mgr., 17 Brief Ave., Upper Darby, Pa., June 29, site imprvs., roads, drainage, grading, FSAC 1-8, from R. H. Cone Co., 350 New Park Ave., Hartford. **$24,947.** CD 6/29.

★**†Connecticut** — SITE IMPROVEMENTS — Pub. Housing Auth., NHA, 24 School St., Boston, Mass., July 2, site imprvs., community bldg., sewers, water, electrical utilities, Project Conn. 6018, from N. Benvenuti & Sons, 16 Elm St., New London. **$1,247,000.** CD 6/25—ENR 6/18.

†Kansas—IMPROVEMENTS—U. S. Eng., 601 Davidson Bldg., Kansas City, Mo., imprvs., addnl. bldgs., from B & W Constr. Co., 307 N. Michigan Ave., Chicago, Ill.

★**†Kansas**—IMPROVEMENTS—U. S. Eng., 416 Wright Bldg., Tulsa, Okla., June 13, imprvs., military housing, from A. J. Rife Const. Co., 2808 Inwood St., Dallas, Tex. Total est. over **$3,000,000.** CD 6/25.

★**†Kansas**—IMPROVEMENTS—U. S. Eng., 416 Wright Bldg., Tulsa, Okla., June 17, imprvs., grading, from Geiger & Rutherford, Leavenworth, and D. G. Hansen, Logan. Total est. approx. **$3,000,000.** CD 6/9—ENR 6/11.

†Louisiana—SITE IMPROVEMENTS — Pub. Housing Auth., NHA, 7 and Taylor Sts., Ft. Worth, Tex., June 25, site imprvs., clearing, grading, sewers, etc., from Winford Sand & Gravel Co., Minden. **$147,518.** CD 6/16—ENR 6/18.

†Maine — UTILITIES, etc. — Farm Security Admin., A. Kopp, bus. mgr., 17 Brief Ave., Upper Darby, Pa., June 27, utilities, water, sewer, electric utilities, roads, sidewalks, etc., from W. H. Hinman, Inc., North Anson. **$183,000.**

†Missouri — SITE DEVELOPMENT — Pub. Housing Auth., NHA, 201 N. Wells St., Chicago, Ill., June 25, from Henry L. Perkinson, 132 E. Douglas St., St. Louis, site imprvs., etc. **$167,560*****from Fred M. Luth, 4135 Flora Pl., St. Louis, gas distr. **$32,034;** water distr. **$33,775;** sanitary and storm sewers. **$55,630.** CD 6/15—ENR 6/18.

†Nevada — IMPROVEMENTS — U. S. Eng., Wright Bldg., Sacramento, June 29, imprvs., Spec. 86, from Dodge Constr. Co., Inc., Fallon, **$377,961.** CD 6/22.

N. Y., North Beach—MARINE TERMINAL BUILDING—Comr. Docks, Pier A, foot of Battery Pl., North River, New York, June 30,

UNCLASSIFIED, (Low Bidders, Cont'd.)

Contr. 2365, 1 story exten., alterations, Marine Terminal Bldg. at New York Municipal Airport, LaGuardia Field, from Hauer Constr. Co., Inc., 15 Beekman St., New York. **$39,000.**

†North Carolina—ELECTRICAL DISTRIBUTION SYSTEM—U. S. Eng., Maxton, June 29 electrical distr. sys., from Bryant Electrical Co., High Point.

★**†South Carolina**—IMPROVEMENTS—U. S. Eng., 33 Customhouse, Charleston, imprvs., from Skinner & Ruddock, 155 E. Bay St., Charleston, **$668,000.**

†Texas—IMPROVEMENTS—U. S. Eng., Federal Bldg., Galveston, imprvs., outside electric distr. sys., from Eugene Ashe Electric Co., 415 Jones St., Fort Worth, **$36,440*****sanitary and storm sewers, facilities and water distr. lines, facilities, from J. W. France, Corpus Christi **$139,680** and **$63,800** respectively.

†Texas — IMPROVEMENTS — U. S. Eng., Citizens Bank Bldg., Denison, imprvs., paving and drainage, grading, from H. Newton, Graham, **$92,000** and **$66,200** respectively. CD 6/19—ENR 6/25.

†Texas — IMPROVEMENTS — U. S. Eng., Federal Bldg., Galveston, June 26, imprvs., sanitary sewer collecting lines, facilities, from A. L. Hays, Port Arthur, **$77,600.** CD 6/11—ENR 6/18.

CONTRACTS AWARDED

†Alabama—IMPROVEMENTS—U. S. Eng., 306 Courthouse, Nashville, Tenn., imprvs., clearing, grubbing, to Wolff & Michael Co., St. Augustine, Fla. CD 6/19—ENR 6/25.

†Alabama—IMPROVEMENTS—U. S. Eng., Courthouse, Mobile, imprvs., grading, paving, Inv. 569-42-710, to Carey W. George & Assoc., Mobile; storm sewers, to F. L. Bray, Battlehouse, Mobile. **Bids 6/2.**

†Arizona — ELECTRICAL TRANSMISSION LINE, etc.—U. S. Eng., 751 S. Figueroa St., Los Angeles, Calif., electrical transmission line and sub-station, to Arizona Edison Co., Casa Grande; electric distr. sys., to New State Electric Co., 214 W. Washington St., Phoenix. Bids 5/20. CD 5/14.

†Arizona—IMPROVEMENTS—U. S. Eng., Albuquerque, N.M., imprvs., grading, paving, to Arizona Constructors, Homebuilders Bldg., Phoenix. **$210,000.** Est. $450,000. Bids 6/3. CD 5/29.

★**†Arkansas**—GAS MAINS, etc.—U. S. Eng., P. O. Box 97, Memphis, Tenn., gas, sewer and water sys., to Reed Constr. Co., 2109 N. 14 St., Birmingham, Ala., est. less than **$1,000,000.**

★**†Arkansas**—IMPROVEMENTS—U. S. Eng., Gay Bldg., Little Rock, imprvs., to Stevens Bros., Miller-Hutchinson Co., 730 Gravier St., New Orleans, La. Est. under **$3,000,000.**

★**†California**—GATE HOUSE—U. S. Eng., 74 New Montgomery St., San Francisco, gate house and entrance gates, to Jere Strizek, Box 156, Tracy, under **$1,000,000.** Awarded 7/1.

†California—IMPROVEMENTS—U. S. Eng., 751 S. Figueroa St., Los Angeles, imprvs., No. 566, to Conyes & Dixson, 3901 Medford St., Los Angeles. Est. over **$25,000.** Bids 6/23, awarded 6/29.

†California—IMPROVEMENTS—U. S. Eng., 751 S. Figueroa St., Los Angeles, imprvs., No. 535, to C. J. Dorfman, 126 N. La Brea Ave., Los Angeles. Est. over **$25,000.** Bids 6/25, awarded 6/29.

★**†California**—IMPROVEMENTS—U. S. Eng., 74 New Montgomery St., San Francisco, imprvs., bldgs., to Paul C. Gibson, 372 Velarde St., Mountain View, under **$1,000,000.** Awarded 7/1.

★**†California** — IMPROVEMENTS — U. S. Eng., 74 New Montgomery St., San Francisco, imprvs., bldg., to Pacific Builders, Salinas, under **$1,000,000.** Awarded 7/2.

†California — IMPROVEMENTS — Industrial Company, imprvs., bldg., to M. J. King, 231 Franklin St., San Francisco. Federally financed. Bids 6/20.

★**†California**—IMPROVEMENTS—U. S. Eng., 74 New Montgomery St., San Francisco, bldgs., to B. Liebman, 3319 Filmore St., San Francisco, under **$1,000,000.** Awarded 6/3.

★**†California**—IMPROVEMENTS—U. S. Eng., 74 New Montgomery St., San Francisco, imprvs., bldgs., to G. C. Renz, 555 5 St., Gilroy and Howson Bros., 175 N. Carmel St., Gilroy, under **$1,000,000.** Awarded 7/1.

†Conn., Hartford — TROLLEY RAIL REMOVAL—City, removing 490,000 lin. ft. trolley rails, various streets, to Mariani Constr. Co., 222 Forbes Ave., New Haven. **$294,000. FWA.**

★**†D. C., Wash.**—IMPROVEMENTS—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., imprvs., NOY 5527, to Harwood-Nebel Constr. Co., 1520 K St. N.W. **$2,850,000.**

★**†Florida**—GREASE RACKS, etc.—U. S. Eng., Courthouse & Postoffice, Jacksonville, grease racks, lubricating facilities, to Kirkpatrick & Pierson, Gainesville, less than **$1,000,000.** Awarded 6/30.

★**†Florida**—IMPROVEMENTS—U. S. Eng., Courthouse & Postoffice, Jacksonville, imprvs., paving, to H. E. Wolf, St. Augustine, less than **$1,000,000.** Awarded 7/1.

★**†Florida**—IMPROVEMENTS—U. S. Eng., Courthouse & Postoffice, Jacksonville, imprvs., grading, drainage, paving, JAC-42-85, to Hubbard Const. Co., Orlando, less than **$1,000,000.** Awarded 6/26. CD 6/29—ENR 7/2.

†Florida — IMPROVEMENTS — U. S. Eng., Courthouse & Postoffice, imprvs., military housing, to Beers Const. Co., 70 Ellis St. N.W., Atlanta, Ga. CD 5/18—ENR 5/21.

★**†Florida** — IMPROVEMENTS — Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., imprvs., NOY 5535, to Paul Smith Constr. Co., J. Y. Gooch Constr. Co., Cone Bros. Contg. Co., and J. D. Manly & Shell Producers Co., P. O. Box 1393, Tampa, **$2,847,920.** Awarded 5/9. CD 6/1.

★**†Florida**—STEAM DISTRIBUTION SYSTEM—U. S. Eng., Courthouse & Postoffice, Jacksonville, steam distr. sys., to Palm Beach Plumbing Co., 115 Lakeview Ave., Palm Beach, less than **$1,000,000.** Awarded 6/29.

★**†Georgia**—ELECTRICAL DISTRIBUTION SYSTEM—U. S. Eng., Courthouse & Postoffice, Jacksonville, Fla., electrical distr. sys., to Ivy H. Smith, 1525 San Mario Blvd. S., Jacksonville, Fla., less than **$1,000,000.** Awarded 6/29.

★**†Kansas**—IMPROVEMENTS—U. S. Eng., 416 Wright Bldg., Tulsa, Okla., imprvs., military housing, to J. O. Burgwin Constr. Co., Professional Bldg., Pittsburgh, Pa. Total est. over **$3,000,000.** CD 6/30—ENR 7/2, under LB.

†Kansas — IMPROVEMENTS — U. S. Eng., 416 Wright Bldg., Tulsa, Okla., imprvs., electric distr. sys., to Continental Contg. Co., Wichita. CD 6/4—ENR 6/4.

†Massachusetts — IMPROVEMENTS — Industrial Company, imprvs., bldg., to Austin Co., 19 Rector St., New York, **N. Y., $308,000.** Bids 6/29; CD 6/22; piping sys., to Underground Steam Constr. Co., 75 Pitts St., Boston. **$25,323.**

†Massachusetts—WHARF—U. S. Eng., Park Square Bldg., Boston, addnl. wharf facilities, to Samuel Glazer, 115 Nichols St., Everett. Bids 6/29. CD 6/30—ENR 7/2.

Mass., Beverly—AIRPORT—City, Eng. Dpt., City Hall, 3rd runway, 4,000 ft. long, 500 ft. wide, **WPA. $250,000.** J. J. Fitzgerald, 600 Washington St., Boston, engr.

★**†Michigan**—IMPROVEMENTS—U. S. Eng., 700 Union Guardian Bldg., Detroit, imprvs., grading, shaping site, drainage, top soiling, seeding, etc., to Denton Constr. Co., 4-255 General Motors Bldg., Detroit, under **$1,000,000.** Bids 6/18.

Minn., Minneapolis—HANGAR—Minneapolis-Honeywell Regulator Co., 2753 4 Ave. S., hangar, at Wold-Chamberlain Airport, to Campbell, Lowrie & Lautermilch Corp., 400 W. Madison St., Chicago, Ill. Est. over **$300,000.**

†Mississippi—IMPROVEMENTS—U. S. Eng., Courthouse, Mobile, Ala., imprvs., clearing, grubbing, Inv. 569-42-780, to Boyd Constr. Co., Columbia. Awarded 6/30.

Mo., Grandview—AIRPORT—City of Kansas City, Mo., A. Cookingham, mgr., loading and hauling excavated stone and crushing it for runways, to Perry McGlone Const. Co., City Bank Bldg., Kansas City, Mo., **$105,000.**

†Nebraska — ELECTRIC SYSTEM — U. S. Eng., 1709 Jackson St., Omaha, imprvs., electric installation, to Myers & Neill Elec. Co., Scottsbluff.

†Nevada — IMPROVEMENTS — U. S. Eng., 751 S. Figueroa St., Los Angeles, Calif., imprvs., electric distr. sys., Inv. 555, to General Constr. Co. & J. Walter Johnson, 5205 Hollywood Blvd., Los Angeles, Calif., over **$25,000.** Awarded 6/30.

★**†Nevada** — IMPROVEMENTS — Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., addnl. facilities, NOY 5520, to Dinwiddie Constr. Co., Inc., 220 Montgomery St., and Monson Bros., 475 6 St., San Francisco. **$2,727,900.**

New Jersey — PARK IMPROVEMENTS — Palisade Park Interstate Comn., 80 Center St., New York, N. Y., imprv. Palisade Park, slope erosion control, excavating, masonry walls, gutters, roads, etc. **WPA. $75,000.** C. Malstrom, Orange and N. 6 Sts., Newark, WPA engr.

N. J., Jersey City — RAILROAD YARD — Pennsylvania R.R., W. D. Wiggins, ch. engr., Broad St. Sta. Bldg., Phila., Pa., imprv. Greenville Yard, covered and lighterage piers, elevator, float bridges, tail tracks, mooring racks, etc., also repairing Jersey City Ferry bridges and Exchange Pl. Station and float bridges, piers, etc., to Allen N. Spooner & Son, Inc., Pier 11, North River, New York, N. Y.

†New Mexico—ELECTRICAL DISTRIBUTION SYSTEM—U. S. Eng., Albuquerque, electric distr. sys., to Lawrence Electric Construction Co., Amarillo, Tex. **$28,000.** CD 5/22.

†New Mexico—ELECTRICAL SUPPLY, etc.—U. S. Eng., Albuquerque, electrical supply, street and area distr. sys., to Bauman Electric & Neon Sign Co., 1800 Texas St., El Paso, Tex. **$77,300.** Est. $150,000. Bids about 5/29. awarded 6/27. CD 5/21.

†New Mexico — IMPROVEMENTS — U. S. Eng., Albuquerque, to W. E. Wirtz, Amarillo, Tex., imprvs., addnl. facilities, **$160,000*****to Bradbury & Merchant, 1217 N. 1[illegible] Albuquerque, bldgs., **$216,000;** water d[illegible] lines, **$38,000;** sanitary sewer lines, facilit[illegible] $84,400. Grand total $498,400. Awarded 6/27 [illegible] CD 6/1[illegible]—ENR 6/18.

★**†New Mexico**—IMPROVEMENTS—U. S. Eng., Albuquerque, imprvs., bldgs., to E. S. McKittrick Co., Inc., 7839 Santa Fe Hy., Huntington Park, Los Angeles, Calif. $789,000. CD 5/21—ENR 5/28 .

★**†New Mexico** — IMPROVEMENTS — U. S. Eng., Albuquerque, imprvs., bldgs., to Murphy & Keith, Tucson, Ariz., $630,000. Awarded 6/26. CD 6/23—ENR 6/25.

★**†New Mexico** — IMPROVEMENTS — U. S. Eng., Albuquerque, imprvs., to Lee Moor and T. W. Hansen, El Paso, Tex., over **$3,000,000.**

†North Carolina—IMPROVEMENTS—U. S. Eng., Maxton, imprvs., to Ballenger Paving Co., Greenville, S. C. Bids 7/1.

O., Conneaut — YARD EXPANSION — New York, Chicago & St. Louis R.R., A. C. Harvey, ch. engr., Terminal Tower, Cleveland, yard expansion, rebuilding trackage, switching tracks, approx. 4 mi. new tracks, own forces. Est. **$120,000.**

†Oklahoma and **Texas**—IMPROVEMENTS—U. S. Eng., Citizens Bank Bldg., Denison, Tex., imprvs., bldgs., to Cowin Bros., 411 S. Haskell St., Dallas, Tex., **$168,000;** bldgs., to Younger Engineering Co., 1225 Milam Bldg., San Antonio, **$286,000.** CD 5/25—ENR 5/28.

†Oklahoma—IMPROVEMENTS—U. S. Eng., Citizens Bank Bldg., Denison, Tex., imprvs., grading, to Russ Mitchell, Inc., 2302 Jefferson St., Houston, Tex. **$76,000.**

†Oklahoma—RAILROAD SPUR—U. S. Eng., Citizens Bank Bldg., Denison, Tex., railroad spur to St. Louis-San Francisco Ry. Co., Altus. **$62,000.** Awarded 7/1.

†South Carolina—IMPROVEMENTS—U. S. Eng., Sumter, imprvs., to W. F. Bowe, Jr., Augusta, Ga. Bids 6/17. CD 6/23—ENR 6/25, under LB.

†Texas—ELECTRIC DISTRIBUTING SYSTEM—U. S. Eng., Fort Sam Houston, electric distr. sys., to Wright Electric Co., Main Ave., San Antonio. **$27,182.**

★**†Texas** — IMPROVEMENTS — Civil Aeronautics Auth., 4th Region, Box 1689, Fort Worth, imprvs., bldgs., to C. Hunter Strain, San Angelo. **$652,748.** CD 6/29—ENR 7/2, under LB.

★**†Texas** — IMPROVEMENTS — U. S. Eng., Albuquerque, N. M., to McMillan, Glover & McCullough, Lubbock, imprvs., bldgs., **$860,000*****to Panhandle-Sira-Dalton, Construction Bldg., Dallas, natural gas. distr. sys., facilities, **$32,000;** water supply sys. **$59,600;** sewage disposal plant, **$78,480*****to Arizona Constructors, Home Builders Bldg., Phoenix, Ariz., grading, paving, etc. **$340,000.** Grand total $1,370,080. CD 5/28.

★**†Texas** — IMPROVEMENTS — U. S. Eng., Federal Bldg., Galveston, imprvs., frame bldgs., to A. Farnell Blair, Decatur, Ga., **$1,600,000.** Bids 6/23.

†Texas—IMPROVEMENTS—U. S. Eng., Fort Sam Houston, imprvs., clearing, grubbing, etc., to Holland Page, Georgetown Rd., Austin, **$27,400:** electrical distr. sys., Spec. 42-145, (T-10), to Taylor Constr. Co., Taylor.

†Texas—IMPROVEMENTS—U. S. Eng., Fort Sam Houston, imprvs., bldgs., (42-1), Spec. 42-127, to Aiken & Hinman, Corpus Christi.

★**†Texas** — IMPROVEMENTS — U. S. Eng., Masonic Bldg., Amarillo, imprvs., AE-API-16, to Austin Bridge Co., 1813 Clarence St., Dallas, approx. **$1,600,000.** CD 6/25—ENR 7/2, under LB.

†Texas — IMPROVEMENTS — U. S. Eng., Citizens Bank Bldg., Denison, imprvs., railway tracks, etc., to Fort Worth & Denver City Ry. Co., Ft. Worth Club Bldg., approx. **$56,000.** Awarded 7/2. CD 6/30—ENR 7/2.

†Texas—RAILWAY SPUR TRACK—U. S. Eng., Albuquerque, N. M., 4½ mi. standard gage railway spur track, grading, etc., to Arizona Constructors, Home Builders Bldg., Phoenix, Ariz. **$52,600.** Est. $40,000 or more. Bids 4/4. CD 3/20.

†Texas—SPRINKLER SYSTEM—U. S. Eng., Fort Sam Houston, automatic sprinkler sys., to Automatic Sprinkler Corp. of America, 1140 Rothwell St., Houston, **$29,500.**

★**†Texas** and **Illinois** — PIPELINE — War Emergency Pipeline, Inc., R. E. Hull, Vice Pres., Little Rock, Ark., 550 mi. seamless tubular steel pipeline from Longview, Tex., to Salem, Ill., or Mt. Vernon, Ind., own forces. **$35,000,000.** RFC will finance. L. M. Goldsmith, engr. in charge pump. stations. CD 6/18—ENR 6/25, under CA.

N. B., Moncton—STORAGE, etc.—Dpt. National Defense and Dpt. National Defense for Air, Ottawa, Ont., addnl. accommodation (storage), at No. 5 Equipment Depot, to Ambrose Wheeler, Ltd., 21 Wesley St., **$145,000;** radio transmitter bldg., staff residence and double garage at airport, to Rayner Constr. Ltd., 29 Commercial St., Leaside, Ont., **$133,188.**

N. S., Halifax—WHARF—Secretary Dpt. P. Wks., Ottawa, Ont., No. 1 Wharf, H. M. C. Dockyard, to M. A. Coudon and Son, Kentville. **$169,000.** CD 5/13—ENR 5/21.

NCLASSIFIED, (Contracts Awarded, Cont'd.)

Ont., Manitowaning — OIL DRILLING — hridge Olson Oil Development Co., Manitowaning, oil drilling, own forces.

Ont., Preston—ELECTRIC RADIAL LINE OVERHEAD REWIRING, etc.—Grand River Ry., Preston, overhead rewiring for electric radial line, and changing sidings, own forces. $50,000.

LATIN AMERICA

Mexico—D. Roditi & Sons, 1440 Bway., New York, N. Y., plans porcelain ware factory, **Guadalajara**, Jalisco, $100,000; Municipal Govt., Palacio Municipal, Saltillo, Coahuila, plans modernization and expansion water and drainage services and reconditioning streets, **Saltillo**, $650,000, R. Siller, National Urban Mortgage & Public Works Bank, Mexico, D.F., engr.

PUBLIC BUILDINGS

PROPOSED WORK

★ **†Alabama**—U. S. Eng., 494 Spring St. N.W., Atlanta, Ga., plant. Over $3,000,000.

★ **†Alabama**—U. S. Eng., 494 Spring St. N.W., Atlanta, Ga., plans by J. B. Converse & Co., Inc., Wilson Bldg., Mobile, and A. C. Polk, Protective Life Bldg., Birmingham, archts. and engrs., military housing. $5,000,000. Clearing, grading, etc., to Ledbetter-Johnson Co., Rome, Ga. CD 6/17—ENR 6/26.

†Alabama—U. S. Eng., Courthouse, Mobile, bids soon bldg. addn.

★ **†Arizona**—U. S. Eng., 751 S. Figueroa St., Los Angeles, Calif., bldg. Over $5,000,000.

★ **†Arkansas**—U. S. Eng., Courthouse & Customhouse, Vicksburg, Miss., bldgs. $2,000,000.

★ **†Arkansas**—U. S. Eng., Postoffice and Courthouse, Vicksburg, Miss., site preparation, roads, walks, utilities, bldgs.

†Ark., Bauxite—School Dist. 14, plans by Earhart & Eichenbaum, General Bldg., Little Rock, 2 school bldgs., teachers bldg. Ark. 3-175. $157,000. **FWA.**

★ **†California**—Housing Auth. of City and County of San Francisco, 525 Market St., San Francisco, low cost housing units, for NHA. $742,000. Applied for permit. Ernest Born, 730 Montgomery St., and H. H. Gutterson, 526 Powell St., San Francisco, archts. A. V. Saph, Rialto Bldg., San Francisco, engr.

†California—Pub. Housing Auth., NHA, Humboldt Bank Bldg., 785 Market St., San Francisco, plans by Harry J. Devine, Cronan Bldg., Sacramento, housing.

†California—Pub. Housing Auth., NHA, Humboldt Bank Bldg., 785 Market St., San Francisco, plans by Harry J. Devine, Cronan Bldg., Sacramento, housing.

†Calif., Vallejo—Farm Security Admin., 30 Van Ness Ave., San Francisco, soon lets contract dormitory bldgs.

Colo., Denver—School Dist. 1, 414 14 St., indefinitely postponed construction Emily Griffith Opportunity School addn. $220,000. W. G. Jamieson & E. Stiffler, 818 12 St., archts. CD 3/26.

†Colo., Englewood—Arapahoe Co., plans by Fisher, Fisher & Hubbell, Denver Natl. Bank Bldg., Denver, health center, Colo. 5-113. $40,000. **FWA.** CD 3/2—ENR 3/5.

†Connecticut—Farm Security Admin., 17 Brief Ave., Upper Darby, Pa., rejected bids June 29, bldgs. FSAC 1-7. CD 6/26.

★ **†Connecticut**—Pub. Housing Auth., NHA, 24 School St., Boston, housing. $2,000,000.

★ **†Connecticut**—Pub. Housing Auth., NHA, 24 School St., Boston, Mass., frame housing. $1,000,000.

★ **†Georgia**—U. S. Eng., Courthouse & Postoffice, Jacksonville, Fla., bldgs.

†Illinois—Pub. Housing Auth., NHA, 201 N. Wells St., Chicago, plans by Lewis, Loebl, Grunsfeld, Frazier & McConnell, 540 N. Michigan Ave., Chicago, defense housing, grading, water distr. sys., storm and sanitary sewers, overhead electrical distr. sys., lawns and planting. CD 6/11—ENR 6/18.

★ **†Louisiana**—U. S. Eng., Postoffice & Customhouse, Vicksburg, Miss., bldgs. $2,000,000.

†Mass., Lynn—Lynn Hospital, 212 Boston St., Lynn, sketches by Stevens, Curtin, Mason & Riley, 45 Newbury St., Boston, nurses' home. $150,000. **FWA.** CD 6/9—ENR 6/11.

Me., Portland—City, School Com., City Hall, plans by Miller & Beal, Inc., 465 Congress St., 1 story, bsmnt., 63x305 ft. and 73x95 ft., brick, granite and limestone Junior High School, Deering Ave. $450,000.

★ **†Michigan** — Industrial Company, plant. $500,000. Federally financed. Russell Engineering Co., 607 Shelby St., Detroit, archt. Giffels & Vallet, Marquette Bldg., Detroit, engrs.

†Mich., Niles—Niles Hospital Bd., B. B. White, pres., plans by Schmidt, Garden & Erickson, 104 S. Michigan St., Chicago, Ill., brick, steel, rein.-con., stone hospital, Mich. 20-159. $237,000. **FWA.** CD 2/3—ENR 2/5.

†Minn., St. Cloud—Veterans Admin., Vermont Ave., between H and I Sts. N.W., Wash., D. C., cancelled bids to have been opened June 30, hospital addn. Project recalled. CD 6/9—ENR 6/11.

★ **†Missouri**—U. S. Eng., Courthouse & Customhouse, St. Louis, bldgs. $2,000,000.

†New Mexico—U. S. Eng., Albuquerque, will not construct temporary type bldgs., paving, fencing. $440,000. Project rescinded. CD 6/16.

★ **†Oklahoma**—U. S. Eng., 416 Wright Bldg., Tulsa, bldgs. $4,000,000.

★ **†Pennsylvania**—J. H. Williams & Co., 400 Vulcan St., Buffalo, N. Y., plant. Defense Plant Corp. will finance.

Pa., Edison—Comrs. Bucks Co., Doylestown, plans by F. F. Marten, Hart Bldg., Doylestown, altering hospital.

★ **†Tennessee**—U. S. Eng., 306 U. S. Courthouse, Nashville, bldg. $2,000,000.

★ **†Texas**—Goodrich Rubber Co., 500 S. Main St., Akron, O., plant. $16,000,000. Federally financed.

★ **†Texas**—Goodyear Tire & Rubber Co., 1144 E. Market St., Akron, O., plant. $9,000,000. Federally financed.

†Texas—U. S. Eng., Fort Sam Houston, military housing. Spec. 42-192.

†Texas—U. S. Eng., Citizens Bank Bldg., Denison, plant.

†Texas—U. S. Eng., Federal Bldg., Galveston, plant.

★ **†Texas**—U. S. Eng., 231 W. Main St., Denison, bldgs. $2,000,000.

★ **†Texas**—U. S. Eng., 25 St. and Avenue F, Galveston, bldgs. $2,000,000.

B. C., Gordon Head—Dominion Govt., Ottawa, Ont., bldgs., etc., for Officers' Training School. $250,000. Dpt. Natl. Defense, Ottawa, Ont., engr.

N. B., St. John—Wartime Housing, Ltd., 55 York St., Toronto, Ont., plans by H. S. Brenan, 42 Princess St., St. John, multiple dwelling bldgs. $150,000. CD 5/4.

N. S., Springhill—All Saint's Cottage Hospital, Springhill, bids soon, hospital bldgs. $180,500.

Ont., Ottawa—Dpt. P. Wks., Ottawa, plans by C. D. Sutherland, c/o owner, and bids soon 6 story office bldg. $600,000.

Ont., Ottawa—Secy. Dpt. P. Wks., Ottawa, bids soon hostel for Army women, Argyle Ave. $250,000. C. D. Sutherland, c/o owner, archt.

Ont., Peterborough—Wartime Housing, Ltd., 55 York St., Toronto, 125 dwellings, Charlotte St. $375,000.

Quebec—Wartime Housing, Ltd., 55 York St., Toronto, Ont., cancelled contract 100 houses at Kenogami. $300,000. CD 4/13—ENR 4/21, under CA.

★ **Que., Montreal**—Wartime Housing Ltd., 55 York St., Toronto, Ont., 1½ story, single dwelling houses. $1,000,000.

BIDS ASKED

Bids Asked After June 30

†Texas—U. S. Eng., Fort Sam Houston, bldgs., military housing, etc. Spec. 42-16. $150,000. Plans deposit $25.

†Texas—U. S. Eng., Fort Sam Houston, 2 groups bldgs., Spec. 42-147. Plans deposit $25 each.

Bids Asked in July

★ **†Alabama**—Pub. Housing Auth., NHA, Georgia Savings Bank Bldg., Peachtree and Broad Sts., Atlanta, Ga., dormitory apartments Ala. 1103; and dormitories, Ala. 1104.

†Arizona—Pub. Housing Auth., NHA, Humboldt Bank Bldg., 785 Market St., San Francisco, Calif., permanent dwellings, Ariz. 3-1.

★ **†Delaware**—Pub. Housing Auth., NHA, Temp. Bldg. 2, 19 and D Sts. N.W., Wash., D. C., housing, Del. 1-2. $1,016,000. CD 4/9—ENR 4/16.

★ **†Michigan**—Pub. Housing Auth., NHA, Barlum Tower Bldg., Cadillac Square and Bates St., Detroit, permanent, and demountable dwellings, Mich. 20054; demountable dwellings, Mich. 20055; demountable dwellings Mich. 20056; demountable dwellings Mich. 20057.

★ **†Michigan**—Pub. Housing Auth., NHA, Barlum Tower Bldg., Cadillac Square and Bates St., Detroit, dormitories, Mich. 20062; demountable dwellings, Mich. 20063.

★ **†Michigan**—Pub. Housing Auth., NHA, Barlum Tower Bldg., Cadillac Square and Bates St., Detroit, demountable dwellings, Mich. 20063.

†Pennsylvania—Pub. Housing Auth., NHA, 270 Bway., New York, N. Y., permanent dwellings, Proj. Pa. 36085. CD 5/5—ENR 5/7.

†Pennsylvania—Pub. Housing Auth., NHA, 270 Bway., New York, N. Y., permanent dwellings Proj. Pa. 17-1 and permanent dwellings Proj. Pa. 17-2. CD 6/9—ENR 6/11.

Bids Asked After July 4

†Tex., Beaumont—City, a hospital, facilities, nurses quarters, Tex. 41-244. $269,000. **FWA.** W. B. Livesay, San Jacinto Life Annex, archt. Stone & Pitts, Goodhue Bldg., archts. CD 4/1—ENR 4/9.

Bids Asked After July 10

★ **†Connecticut**—Pub. Housing Auth., NHA, 24 School St., Boston, Mass., housing, Conn. 6017. $500,000. Cudworth & Thompson, 257 Main St., Norwich, archts. Henri Van Zelm, 11 Asylum St., Hartford, engrs. CD 6/22—ENR 6/25.

Bids Asked After July 13

★ **†Connecticut**—Pub. Housing Auth., NHA, 24 School St., Boston, Mass., plans by Maxwell Moore & Charles Salisbury, 967 Farmington Ave., West Hartford, housing, Conn. 6037. $500,000. CD 7/2, under BA.

Bids Asked July 14

★ **†Connecticut**—Pub. Housing Auth., NHA, 24 School St., Boston, Mass., housing, CONN 6081. H. Stubbins, Jr., 1430 Massachusetts Ave., Cambridge, Mass., archt. $1,250,000. CD 4/6—ENR 4/9.

†Ohio—Pub. Housing Auth., NHA, 201 N. Wells St., Chicago, Ill., housing, Project Ohio 33034. Extended date. CD 7/2—ENR 6/11.

Bids Asked July 16

★ **†Texas**—Pub. Housing Auth., NHA, Electric Bldg., Fort Worth, housing, streets, utilities, etc., Tex. 41-113. $500,000. Hedrick & Lindsley, 818 Southern Standard Bldg.,

★ **†Texas**—Pub. Housing Auth., NHA, Electric Bldg., Fort Worth, permanent houses, streets, utilities.

†Washington—Bureau Reclamation, Denver, Colo., furnishing, del., fabricated structural steel for steel structures for units L-4 to L-8 (inclusive) in left 230 kv. switchyard, Grand Coulee Power plant, Columbia Basin Proj. Spec. 1650-D.

Bids Asked July 17

†Arizona-California-Nevada—Bureau Reclamation, Customhouse, Denver, Colo., steel supporting structures for inclined rim tower, 4 stub angles, roof line take-off structure, lightning arrester support, for Metropolitan Water Dist. transformer circuit No. 7, at Boulder switchyard, Boulder Canyon project, Spec. 1651-D.

†N. C., Tarboro—Pub. Bldgs. Admin., C St. between 18 and 19 Sts. N.W., Wash., D. C., mailing platform, driveway exits, etc. at post office.

Bids Asked July 21

★ **†Arkansas**—Wittenberg & Delaney, archts., Pyramid Bldg., Little Rock, addnl. houses, Ark. 3043, Ark. 3044, for Pub. Housing Auth., NHA, 7 and Taylor Sts., Fort Worth, Tex. $1,250,000. CD 5/28—ENR 6/4.

†Indiana—Veterans Admin., Arlington Bldg., Wash., D. C., bldg., No. 124, and connecting corridor, No. 15-124, Project 1867. Extended date. CD 5/21—ENR 5/28.

Bids Asked July 22

†Pennsylvania—Pub. Housing Auth., NHA, 270 Bway., New York, N. Y., housing, Projects Pa. 36272 and Pa. 36273. Extended date. CD 6/8—ENR 6/11.

Bids Asked July 24

†O., Dayton—Pub. Bldgs. Admin., C St. between 18 and 19 Sts. N.W., Wash., D. C., plaster repairs, painting post office and courthouse.

Bids Asked July 28

†Pennsylvania—Allegheny County Housing Auth., F. L. Palmer, exec. dir., 201 County Office Bldg., Pittsburgh, housing, Project Pa. 36104, for NHA. Extended date. CD 6/15—ENR 6/18.

Bids Asked August 14

†Pennsylvania—Allegheny County Housing Auth., F. L. Palmer, exec. dir., 201 County Office Bldg., Pittsburgh, housing Project Pa. 36105, for NHA. P. T. Farrell, 309 4 St., Pittsburgh, archt. CD 6/9—ENR 6/11.

Bids Asked August 24

★ **†New Jersey**—Pub. Housing Auth., NHA, 270 Bway., New York, N. Y., housing, N. J. 28044. F. H. Radey, 101 N. 7 St., Camden, archt.

Bids Asked September 2

★ **†Pennsylvania**—Pub. Housing Auth., NHA, 270 Bway., New York, N. Y., housing, Project Pa. 36258. Silverman & Levy, Architects Bldg., 17 and Sansom Sts., Phila., archts. CD 6/5—ENR 5/7.

Bids Asked

†Massachusetts—U. S. Eng., Park Square Bldg., Boston (selected bidders), bldgs.

★ **†Texas**—U. S. Eng., Fort Sam Houston, military housing, etc., Spec. 42-62. Plans deposit $25.

†Texas—U. S. Eng., Fort Sam Houston, bldgs., electric distr. sys., etc. Spec. 42-157. Over $150,000. Plans deposit $25.

†Texas—U. S. Eng., Fort Sam Houston, bldgs. Spec. 42-174. Plans deposit $25.

LOW BIDDERS

†Alabama — U. S. Eng., Bynum, June 29, bldgs., from Marbury & Bariss Constr. Co., Massey Bldg., Birmingham. J. B. Converse & A. C. Polk, Bynum, engrs.

†Alabama — U. S. Eng., Bynum, June 29, fire station, dormitory, from Marbury & Bariss Constr. Co., Massey Bldg., Birmingham. J. B. Converse & A. C. Polk, Bynum, engrs.

†D. C., Wash.—Pub. Bldgs. Admin., C St. bet. 18 and 19 Sts. N.W., Wash., D. C., June 19, feed water heater and pumps, Central Heating Plant, from Interboro Heating Co., 109 E. 29 St., New York, N. Y., **$51,920.**

†Louisiana—U. S. Eng., foot of Prytania St., New Orleans, June 26, bldgs., utilities, Inv. 583, from Perrilliat-Rickey Constr. Co., 1530 S. Rendon St., New Orleans.

†Louisiana—U. S. Eng., Prytania St., New Orleans, June 29, bldg., Inv. 597, from Boh Bros. Constr. Co., 2400 Cypress St., New Orleans.

★ **†Texas**—U. S. Eng., Federal Bldg., Galveston, June 26, bldgs., from A. L. Hays, Port Arthur. **$636,000.**

CONTRACTS AWARDED

★ **†Alabama**—Industrial Company, plant, to Cunningham, Rudy Co., 3087 W. Grand Blvd., Detroit, Mich.; equipment design and

PUBLIC BLDGS (Contracts Awarded, Cont'd.) installation, to Foster Wheeler Co., 165 Bway., New York, N. Y. Total est. **$1,250,000.** Defense Plant Corp. will finance. Giffels & Vallet, Inc., 1000 Marquette Bldg., Detroit, Mich., engrs.

†Alabama—U. S. Eng., Courthouse, Mobile, military housing, Inv. 569-42-743, to Henderson, Black & Greene Co., Troy. Bids 6/29. Burge & Stevens, Palmer Bldg., Atlanta, Ga., archts.

★ **†Alabama**—U. S. Eng., Huntsville, plant addn., to Kershaw-Butler & Engineers, Ltd., Huntsville***plumbing, to O'Pry Plumbing & Heating Co., Walton Bldg., Atlanta, Ga. ***electrical work to Juneman Electric Co., 101 S. 21 St., Birmingham. Total est. over **$1,000,060.** Whitman, Requardt & Smith, Inc., Huntsville, engrs.

†Arizona—U. S. Eng., Albuquerque, N. M., bldgs., to E. W. Duhome, Prescott. **$280,000.** Awarded 6/26. CD 5/22.

★ **†Arizona**—U. S. Eng., 751 S. Figueroa St., Los Angeles, military housing, to W. A. Beaubien, 2901 W. Taylor St., Phoenix. Est. over **$3,000,000.**

†Arkansas—U. S. Eng., Gay Bldg., Little Rock, bldgs., roads to E. V. Bird Const. Co., Fayetteville. Awarded 6/23. Black & Veatch, 4706 Bway., Kansas City, Mo., engrs.

†Arkansas—War Dpt., 20 St. and Constitution Ave., N.W., Wash., D. C., bldg., to E. V. Bird Const. Co., Fayetteville. Awarded 6/22. Black & Veatch, 4706 Bway., Kansas City, Mo., engrs.

★ **†California**—Industrial Company, plant, to Cahill Bros., 206 Sansome St., San Francisco. Est. about **$12,000,000.** CD 5/27—ENR 6/4. Defense Plant Corp. will finance.

★ **†California**—U. S. Eng., 74 New Montgomery St., San Francisco, bldgs., to H. C. Geyer, 787 Munras Ave., Monterey, under **$1,000,000.**

†Connecticut—U. S. Eng., 819 Industrial Trust Bldg., Providence, R. I., bldgs., to M. J. Walsh & Sons Constr. Co., Shawmut Ave., Holyoke, Mass.

†Connecticut—U. S. Eng., 819 Industrial Trust Bldg., Providence, R. I., bldg., to Miller-Davis Co., 1 Williams St., Wallingford.

★ **†Florida**—U. S. Eng., Courthouse & Postoffice, Jacksonville, bldgs., Inv. Neg. JAX-42-37, to Ormand-Vickers-Smith, Frutland Park, less than **$1,000,000.** Awarded 6/27.

★ **Florida**—U. S. Eng., Courthouse & Postoffice, Jacksonville, bldgs., to Beers Constr. Co., 70 Ellis St. N.E., Atlanta, Ga., less than **$1,000,000.** Awarded 6/29.

★ **†Florida**—U. S. Eng., Courthouse & Postoffice, Jacksonville, bldgs., to J. W. Knope, Ocala, less than **$1,000,000.** Awarded 6/30.

★ **†Florida**—U. S. Eng., Courthouse & Postoffice, Jacksonville, bldgs., to Johnson & Mann, St. Petersburg, less than **$1,000,000.** Awarded 6/29.

★ **†Florida**—U. S. Eng., Courthouse & Postoffice, Jacksonville, bldgs., to Heath & Mann, St. Petersburg, less than **$1,000,000.** Awarded 6/29.

★ **†Florida**—U. S. Eng., Courthouse & Postoffice, Jacksonville, bldgs., to Stevens & Sipple, Orlando, less than **$1,000,000.** Awarded 6/30.

★ **†Florida**—U. S. Eng., Courthouse & Postoffice, Jacksonville, bldgs., Inv. 436-12, to J. S. Wilson, Palm Beach, less than **$1,000,000.** Awarded 6/27.

★ **†Florida**—U. S. Eng., Courthouse & Postoffice, Jacksonville, bldgs., to A. W. Smith, Leesburg, less than **$1,000,000.** Awarded 6/29.

★ **†Florida**—U. S. Eng., Courthouse & Postoffice, Jacksonville, painting exterior surface bldgs., to W. P. Fleischer, Inc., West Palm Beach, less than **$1,000,000.** Awarded 7/1.

†Georgia—U. S. Eng., 494 Spring St. N.W., Atlanta, 3 bldgs., to Van Winkle & Walkins, 273 E. Paces Ferry Rd., Atlanta.

†Georgia—U. S. Eng., 494 S. Spring St. N.W., Atlanta, addnl. bldg., to Stillwell Const. Co., Macon.

★ **†Georgia**—U. S. Eng., Courthouse & Postoffice, Jacksonville, Fla., military housing, Inv. 436-42, to Smith, Yetter & Griffin, 337 Worth Ave., West Palm Beach, Fla., less than **$1,000,009,** military housing, to P. E. Jinright, Thomasville, less than **$1,000,000.** Awarded 6/26.

†Illinois—Rock-Ola Mfg. Corp., 800 N. Kedzie Ave., Chicago, plant, to Rooney Constr. Co., 1646 N. Wells St., Chicago. Federally financed. Awarded 6/22. Alschuler & Friedman, 28 E. Jackson Bldg., Chicago, archts.

★ **Illinois**—U. S. Eng., 800 Courthouse & Customhouse, St. Louis, Mo., bldgs., to Dickie Constr. Co., 517 Louderman Bldg., St. Louis, Mo.

†Illinois—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., bldgs., to Welso Constr. Co., 2233 W. Grand Ave., Chicago.

†Illinois—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., bldgs., to Patterson & Hartrich, 105 W. Adams St., Chicago.

★ **†Kansas**—Industrial Company, bldg. addns. for War Dpt., to Jas. Stewart Corp., 343 S. Dearborn St., Chicago, Ill., over **$3,003,000.**

†Maine—U. S. Eng., Park Square Bldg., Boston, Mass., bldg., to T. W. Cunningham, Inc., 15 State St., Bangor. Bids 6/25.

†Maine—U. S. Eng., Park Square Bldg., Boston, Mass., bldg., to J. Slotnik Co., 38 Newbury St., Boston, Mass. Bids 6/26. CD 6/23.

†Maine—U. S. Eng., Park Square Bldg., Boston, Mass., temporary military housing to Pitman & Brown Co., 40 Bridge St., Salem, Mass.

★ **†Maryland**—Baltimore Housing Auth., 709 E. Eager St., Baltimore, housing etc., MD-2-9, for NHA, to Wilaka Constr. Co., 384 E. 149 St., Baltimore. **$3,922,000.** CD 5/9—ENR 5/14.

†Massachusetts—U. S. Eng., Park Square Bldg., Boston, bldgs., G. V. No. 211, to J. J. Powers Co., 238 Main St., Cambridge., construction work, G. W. No. 313, to Steed Barber Corp., 7 Water St., Boston.

†Massachusetts—U. S. Eng., Park Square Bldg., Boston, construction work, and military housing, operating and storage facilities, to John Bowen Co., 129 Newbury St., Boston. Bids 6/27.

★ **†Massachusetts**—U. S. Eng., Park Square Bldg., Boston, constructing, altering temporary bldgs., to J. M. and C. J. Buckley Co., 45 Milk St., Boston***construction work, to Chandler Constr. Co., Inc., 45 Newbury St., Boston***military housing, utilities, to Karl F. Jackson, 214 High St., Boston***bldg., to G. B. H. Macomber Co., 38 Chauncy St., Boston. Bids 6/27***construction work, to J. E. Bennett Co., 91 Newbury St., Boston.

†Massachusetts—U. S. Eng., Park Square Bldg., Boston, bldgs., to F. Grande & Sons Constr. Co., 425 Bway., Everett. Bids 6/29. CD 6/25.

★ **†Michigan**—U. S. Eng., 700 Union Gardian Bldg., Detroit, bldgs., to Atkin-Fordon Co., 7360 W. Chicago St., Detroit, under **$1,000,000;** clearing, grubbing site, bldgs., to Haberkorn-Barry Co., 2-135 General Motors Bldg., Detroit, under **$1,000,000.**

†Mississippi—Pub. Housing Auth., NHA, Electric Bldg., 7 and Taylor Sts., Ft. Worth, Tex., housing administration bldg., recreational bldg., to Currie & Corley, Raleigh. **$337,000.** Krouse & Brasfield, Meridian, archts.

★ **†Mississippi**—U. S. Eng., Courthouse, Mobile, Ala., bldgs., to J. Day, 2400 5 Ave. S., and Harrison Richardson, 431 S. 24 St., Birmingham, Ala. Est. over **$3,000,000.** CD 7/1, under LB.

★ **†Missouri**—U. S. Eng., 601 Davidson Bldg., Kansas City, Mo., MJ Plant to Long Const. Co., Rialto Bldg., Kansas City, Mo. and Turner Const. Co., 420 Lexington Ave., New York, N. Y. Est. approx. **$85,000,000.** Albert Kahn Associate, Architects & Engineers, Inc., 345 New Center Bldg., Detroit, Mich., archts.

†New Hampshire—U. S. Eng., Park Square Bldg., Boston, Mass., military housing facilities, to J. Slotnik Co., 38 Newbury St., Boston, Mass. Bids 7/1.

†New Hampshire—U. S. Eng., Park Square Bldg., Boston, Mass., bldgs., to J. Slotnik Co., 38 Newbury St., Boston, Mass. Bids 6/27.

★ **†New Jersey**—Industrial Co., plant alterations, to Hugh Montague & Son Co., 880 Bergen Ave., Jersey City, **$750,000.** Federally financed. Albert Kahn Assoc., Inc., 345 New Center Bldg., Detroit, Mich., archt. and engr.

★ **†New Jersey**—U. S. Eng., 120 Wall St., New York, N. Y., four 180x1,440 ft. brick, rein.-con. bldgs., to Brann & Stuart Co., Broad St. Sta. Bldg., Phila., Pa., **$4,000,000.** Wm. Higginson & Son, 101 Park Ave., New York, N. Y., archt.

†New Mexico—U. S. Eng., Albuquerque, bldgs., to H. W. Balay, Albuquerque, **$175,000.** Awarded 6/26. CD 6/11—ENR 6/18.

★ **†New York**—Tonawanda Housing Auth., 33 S. Niagara St., Niagara, housing, Project N. Y. 9 and Colin Kelly Heights Housing, Project N. Y. 10, for NHA, to C. B. Ross, Co. Inc., 2 Lafayette St., New York, **$826,897** and **$664,203** respectively. Bids 6/16. CD 6/22—ENR 6/25, under LB.

★ **†New York**—U. S. Eng., Chimes Bldg., Syracuse, bldgs., etc., to J. W. Ryan Const. Co., Inc., 369 Lexington Ave., New York. **$2,706,445.** Bids 6/18. CD 6/22—ENR 6/25, under LB.

★ **†Ohio**—Industrial Company, factory, to C. E. Knowles Co., 1941 Central Blvd., Cheektowaga, Buffalo, N. Y. Est. **$900,000** for building only. Total est. $3,000,000. Awarded 6/25. Defense Plant Corp. will finance. CD 6/16—ENR 6/18.

†Oklahoma — Pub. Housing Auth., NHA, Temp. Bldg. 2, 19 and D Sts. N.W., Wash., D. C., housing, Okla. 34021, to D. C. Bass & Sons Constr. Co., Enid. **$243,000.** CD 1/20—ENR 1/22.

★ **†Pennsylvania**—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., bldg., NOY 5384, to Thomas F. Gibson Co., Commercial Trust Bldg., Phila., **$720,000.**

†South Dakota—U. S. Eng., 1709 Jackson St., Omaha, Neb., addnl. bldgs., facilities, to Kulpers Constr. Co., Mitchell.

★ **†Texas** — Industrial Company, plant, to Lummus Co., 420 Lexington Ave., New York, N. Y. **$38,000,000.** Defense Plant Corp. will finance.

★ **†Texas**—Industrial Company, design and construction plant, to Geo. A. Fuller Co., 597 Madison Ave., New York, N. Y., **$8,000,000.** Federally financed.

★ **†Texas**—Industrial Company, design and construction plant, to Geo. A. Fuller Co., 597 Madison Ave., New York, N. Y. **$9,000,000.** Federally financed. CD 7/6.

★ **†Texas**—Industrial Company, plant, to Arthur G. McKee & Co., 2300 Chester Ave., Cleveland, O., **$1,200,000.** Federally financed.

★ **†Texas**—Industrial Company, plant, to Arthur G. McKee & Co., 2300 Chester Ave., Cleveland, O., **$1,500,000.** Federally financed.

★ **†Texas**—Industrial Company, plant, to Arthur G. McKee & Co., 2300 Chester Ave., Cleveland, O., **$780,000.** Federally financed.

★ **†Texas**—Industrial Company [illegible] Wood, Sweeney, $2,000,000. Federally financed.

★ **†Texas**—U. S. Eng., Albuq[illegible] military housing, to Lamb[illegible] Millian, Lubbock. **$580,000.**

†Texas—U. S. Eng., Fort S[illegible] H[illegible] bldg., Spec. 42-122, to W. R. Da[illegible] Co., 148 E. Huisache St., San An[illegible] $68,200 bldg., to Jno. Westerhoff & Son, [illegible] St., San Antonio, **$48,390.**

†Texas—U. S. Eng., Fort S[illegible] H[illegible] bldg., grading, surfacing, storm sewers, water, gas, electric connections, etc. Spec. 42-[illegible] to J. Lockhart, Builders Exch., San An[illegible] **$52,560.** Bids 6/18.

†Texas—U. S. Eng., Federal [illegible] ton, bldg., to Smith Bldg. Co., [illegible] Waco. **$105,000.**

★ **†Washington**—U. S. Eng., [illegible] Seattle, bldg., to Moore & Roberts, [illegible] sion St., San Francisco, Calif., over $3,000,000. CD 6/15—ENR 6/18.

†Wisconsin—Industrial Company, altering plant, Contr. 1922-A, to Hunzinger Const. Co., Sta. K, Milwaukee. Albert Kahn Associated Archts. and Engrs., Inc., 345 New Center Bldg., Detroit, Mich., archts. and engrs. Defense Plant Corp. will finance.

★ **†Wisconsin**—U. S. Eng., U. S. Post Office & Customhouse, St. Paul, Minn., letter of intent to Permanent Constr. Co., 208 S. La Salle St., Chicago, Ill., construction-management services, plant. Over **$3,000,000.**

N. S., New Glasgow and Pictou—War[illegible] Housing, Ltd., 55 York St., Toronto, [illegible] staff houses and commissary, New Glasgow and 150 addnl. houses at Pictou, to [illegible] Woodworkers, Ltd., New Glasgow, [illegible] **$375,000.** CD 1/22—ENR 1/29.

COMMERCIAL BUILDINGS

PROPOSED WORK

Calif., Vallejo — Kesterson Lumber Co., Klamath Falls, Ore., 600 homes, Hy. 40 [illegible] Springs Rd. Over $150,000.

Conn., New Britain—Warner Bros. Theatres Inc., 321 W. 44 St., New York, N. Y., rebuilding brick, steel theatre, Main St., destroyed [illegible] fire. $150,000.

Conn., Orange—John Chapnick, 152 Temple St., New Haven, preliminary surveys E. [illegible] Bradley, 302 Union St., West Haven, homes $150,000.

★ **Ga., Wellston**—McKeon Constr. Co., [illegible] Ellis St. N.E., Atlanta (1st unit), [illegible] (ultimately 1,000) homes, Warner Robins Manor, near here. J. B. McCrary Co., [illegible] 22 Marietta St. Bldg., Atlanta, engrs.

Md., Takoma Park (sta. Wash., D. C.)—Washington Sanitarium, Takoma Park, hospital addn. $350,000.

★ **N. J., Bayonne**—Salem Homes Corp., [illegible] 157 St. Flushing, N. Y., one hundred [illegible] 2 story, bsmnt., brick homes, Hudson [illegible] $975,000.

N. J., Cranford—Birchwood Homes, [illegible] 342 Madison Ave., New York, N. Y., plans by L. Kurtz, 15 W. 44 St., New York, N. Y., one hundred twenty 1 story, bsmnt., frame homes, Wilshire Village. $420,000.

★ **N. J., Cranford**—Cranford Defense Housing Co., 277 Bway., New York, N. Y., plans by Pomerance & Breines, 46 E. 49 St., New York, N. Y., 200 frame homes. $800,000.

N. J., Hillside (br. Elizabeth)—Hollywood Homes, Inc., 287 Goldsmith Ave., Newark, plans by A. J. Silberstein, 24 William St., Newark, thirty 2 story, bsmnt. homes, [illegible] St. $240,000.

N. J., Kearny (br. Arlington)—J. [illegible] 66 Court St., Brooklyn, N. Y., plans by [illegible] Brienbaum, 303 W. 42 St., New York, N. Y., thirty-six 2 story, bsmnt., brick veneer, frame homes, Passaic Ave. $198,000.

N. J., New Brunswick—Crown Estates, [illegible] A. Stanley Miller, archt., 1170 Bway., New York, N. Y., preparing plans 33 homes, Woodbridge Ave. $165,000.

N. J., Orange—Hunter Lindsay Corp., [illegible] N. Day St., plans by Henry Barret Crosby, 19 N. Fullerton Ave., Montclair, group 2 story, bsmnt., brick veneer, frame garden apartments, Park Ave. $250,000.

N. J., Roselle—Warinanco Village, [illegible] Garden Dr., plans by I. Naftali, 900 Bergen Ave., Jersey City, 2 story, bsmnt., brick garden type apartments, Warinanco Village, Garden Dr.

N. J., Woodbridge — New Jersey Defense Housing Corp., 125 Broad St., Elizabeth, plans by C. Levitt, 211 Cook St., Brooklyn, N. Y., ninety 1 story, bsmnt., frame homes, Lyman Ave. **$360,000.**

O., Euclid (br. Cleveland)—Dura-B[illegible] Homes, Inc., 23190 Lake Shore Blvd., Cleveland, 70 homes. **$350,000.**

Pa., Phila.—Evangelical Lutheran Presbyterian Church, church, Vernon Rd. from Rugley St. to Woolston Ave.

Wis., Milwaukee—First Wisconsin Trust Co., 735 N. Water St., twelve 4 apartment bldgs., W. Capitol Dr. $200,000.

OMMERCIAL BLDGS. (Proposed Work, Cont'd.)

Que., Montreal—Jewish General Hospital, nd., 7 Cote Ste. Catherine Rd., hospital addn. $.75,000.

CONTRACTS AWARDED

Ariz., Morenci—**Phelps Dodge Corp.**, Morenci. 40 residences, to **H. R. Meadows, 2815** N. Central St., **Phoenix. Est. $200,000. Lescher & Mahoney, Title & Trust Bldg., Phoenix,** archts.

Calif., North Long Beach (br. Long Beach)—M. A. **Sommers, 2000 Santa Fe Ave., Long** Beach. 150 **dwellings. Owner builds. $480,000.**

Calif., Sunnyvale—S. **Hymen (owner and** archt.) 115 **Ericson Rd., Hillsborough, 35-45** home tract, **Victory Village Tract, to Ray** Agnoletti, 1062 **Lick Ave., San Jose. Est.** over **$150,000.**

Conn., West Haven (br. New Haven)—Strathmore **Homes, Inc., Jones Hill Rd., eighty-**four 1½ **story, bsmnt. 24x28 ft. homes to** G. Fetzer, 18 **Shelley Ave., Valhalla, N. Y.,** **$336,000.** J. S. **Thornley, Nyack, N. Y., archt.**

Del., Hollyoak — Perkins-Culhane Constr. Co., **Edgewood Heights, Highland Gardens** development, **to R. E. Johnson Co., Wayne,** Pa. **$175,000. A. Carroll, 1310 Spruce St.,** Phila., Pa., archt. **Damon & Foster, Chester** Pike and **High St., Sharon Hill., Pa., engrs.**

Ill., Chicago—Illinois **Institute of Tech**nology, H. T. Heald, **pres., 3300 S. Federal St.,** 2 story, 121x313 **ft., brick, concrete, steel** metallurgy **bldg., to Dahl Stedman Co., 11 S.** La Salle St. **Bids** 6/15. CD 6/15—ENR 6/18.

Mass., Springfield—Canterbury **Management,** Inc., 63 Elm **St., 126 frame homes, East** Forest **Park at Allen St., to August Johnson,** Inc., 69 **Meacham Rd., Somerville. Est.** **$550,000. S. Glaser, 162 Newbury St., Boston,** archt.

N. J., Avenel—United Colonial **Homes, Inc.,** 55 Court **St., Brooklyn, N. Y., one hundred** 1 story, bsmnt., **frame homes, near Route** 25, separate contracts. **$450,000. M. C. Tuzik,** 24 **Smith St., Perth Amboy, archt. CD 4/2—** ENR 4/9.

N. J., East Paterson—Birchwood **Building** Corp., **Hillman Dr., eighty-five 1¼ story,** bsmnt., **frame homes, Hillman Dr., separate** contracts. **$340,000.**

★ **N. J., New Milford—Boyd Associates, 70** E. 45 **St., New York, N. Y., two hundred** 1½ **story, bsmnt., frame homes, State Hy.,** separate contracts. **$600,000. CD 6/4—ENR** 6/11.

N. J., Roselle—Normandy **Estates, Inc., 66** Court **St., Brooklyn, N. Y., sixty-five 1½** story, **bsmnt., brick veneer, cement block** homes, **Chandler Ave., separate contracts.** **$260,000. A. J. Silberstein, 24 William St.,** Newark, archt.

★ **N. J., Westfield**—G & F **Contg. Corp., 63-** 24 **Roosevelt Ave., Woodside, N. Y., one** hundred **thirty 1½ story, bsmnt., frame** homes, **Pine Grove Ave., separate contracts.** **$520,000.**

★ **N. J., Westfield**—Van **Ness Defense Homes,** Inc., 24 **Commerce St., 72 (ultimately** 175) **1½ story, bsmnt., frame homes, Will**shire **Village at Central Ave., separate con**tracts. **$396,000.** Ultimate **expenditure** $962,500. CD 2/25—ENR 3/5.

O., Columbus—R. **Lewis, Barnesville, 25 to** 30 **homes, E. 5 St. north of James St., to** Fireproof **Constr. Co., 864 Cassidey Ave.** **$150,000. Awarded 6/27.**

Pa., Ellwood City—Ken **Fox, 143 Lawrence** Ave., **50 residences, 1½ and 2 story, bsmnt.,** 26x30 ft., **to F. G. Smith, New Castle, RD1.** Est. **$250,000.**

Pa., Phila.—Germantown **Friends School,** Coulter **St. between Germantown Ave. and** Greene **St., altering school, to J. S. Cornell &** Son, Inc., 1528 Cherry St.

Pa., Sharon — E. S. Hanna, **archt., 170 W.** State St., 4 **story, bsmnt., 40x160 ft., brick,** le **hospital. 20x40 ft. rear wing addn., 740 E.** State **St., for Bd. Trustees Buhl Hospital.** C. D. **Jeffries supt., to Edward Crump Jr.,** Inc., 4031 **Bigelow Blvd., Pittsburgh. Est.** **$250,000.** Bids about 5/15. CD 3/26—ENR 4/2.

Tex., Beaumont—Moore-Kelly **Development** Corp., Beaumont, 80 **frame type dwellings, to** L. D. **Ramsey, Beaumont. $165,000.**

★ **Wash., Seattle**—P. **Keller-Block, 4841 E.** 43 **St. houses, near 35 Ave. S.W. and S.W.** 100 St., day labor. **$1,250,000. Stuart & Dur**ham, **Fourth & Cherry Bldg., archts. Morford** & **Mowry, Lyon Bldg., engrs. CD 6/29—** ENR 7/2.

INDUSTRIAL BUILDINGS

PROPOSED WORK

Calif., San Andrea—**PLANING MILL**—**Blagen Lumber Co., Toyon, rebuilding planing** mill, **Toyon, near here. $50,000.**

Conn., Stamford — FACTORY — Northam Warren **Corp., Barry Pl., brick factory addn.** $40,000.

Ind., Fort Wayne—**FREIGHT TRUCK TERMINAL**—Inter-State **Motor Freight** System, 1700 **Wall St., freight truck** terminal. **$40,000** or more.

Massachusetts — PLANT — General Electric Co., 920 Western Ave., Lynn, soon lets contract plant, No. 64-7. $40,000.

Mass., Quincy — PLANT — Bethlehem **Steel** Co., E. Howard St., soon **lets** contract 2 story, 20x90 ft., **concrete**, mill construction brass foundry pattern **storage** plant.

N. J., Camden—PLANT—Flexitallic Gasket Co., 8 and Bailey Sts., **plans** by G. M. Ewing, Architects Bldg., Phila., Pa., **mfg.** plant addn.

N. J., Clifton—BUS TERMINAL—Clifton Terminal Corp., 219 Gregory Ave., Passaic, plans by Huesmann & Osborne, 13 Orient Way, Rutherford, 1 **story**, 125x200 ft., brick bus terminal, Main Ave.

N. Y., Buffalo—PLANT—McCauley Metal Product**s**, Inc., 660 Grant St., 1 story plant addn. Over $40,000.

N. Y., Elmhurst (sta. Flushing)—GARAGE—Terminal **Garage**, Inc., 39-01 **Main** St., **Flushing, plans by A. H. Salkowitz**, 37-60 82 St., Jackson Heights, 1 and 2 **story garage**, repair **shop**, etc. $100,000.

N. Y., Long Island City—FACTORY—General **Bronze Corp., 34-19 10 St., 1 and 2 story**, 100x348 ft., **factory and office, 34-12** 10 St. **$75,000**, S. **Strauss**, c/o Owner, archt.

N. Y., New York—FACTORY—Hydrawmatic Machine Co., 408 Concord **Ave.**, plans by Moore & Landsiedel, 509 Willis Ave., 2 story, 72x126 ft. factory and **office** bldg., 145 St. and Wales Ave. $75,000.

N. Y., Wellsville—PLANT—Moore Steam Turbine Co., Wellsville, plant **addn.** Over $40,000.

O., Cleveland—FOUNDRY—National Metal **Abrasives** Co., H. Marrette, **secy.-treas.**, 3560 Norton Rd., brick, **steel foundry** addn. $40,000.

O., Cleveland—PLANT—Wellman Bronze and Aluminum Co., F. S. Wellman, **pres.**, 6017 Superior Ave., **plans** by F. Haushka, Chester-Ninth Bldg. plant addns. $50,000.

Pa., Bradford—PLANT—Bovaird & **Seyfang** Co., Bradford, **altering** constructing plant addns. Over $50,000.

Pa., Mill Hall—PLANT—Sheffield Farms Co., Inc., 425 W. 57 St., New York, N. Y., 1 story milk **products** plant. $40,000 incl. equip.

Pa., Phila.—PLANT—Kessler Chemical Co., Cottman St. and State Rd., plant.

Pa., Williamsport—BOILER UNIT—Pennsylvania **Power & Light Co., Williamsport**, addnl. boiler unit, **steam generating** plant, foot of Hepburn St. $40,000.

R. I., Bristol—PLANT—U. S. Rubber Co., 500 Wood St., **soon lets contract 1 story**, brick, **lead press unit plant.**

R. I., Pawtucket—WAREHOUSE—**Anaconda** Wire & Cable Co., **Pawtucket Ave., plans completed by Monahan & Meikle, 255 Main St., soon lets contract, 1 story, 125x160 ft., rein.-con., steel warehouse. $60,000.**

Wis., Prarie du Sac—PLANT—American Pipe & Constr. Co., 4635 **Firestone** Bldg., Southgate, Los Angeles, Calif., plant.

Alta., Rocky Mountain House—**PLANT**—Ram River Oils Ltd., c/o A. Cyril Perry, Windsor, Ont., plant and **storage** tanks. $50,000.

B. C., Egmont—CANNERY—Queen Charlotte Fisheries, Ltd., New Westminster, cannery, etc., Seechelt Inlet, New Westminster Dist. $40,000.

B. C., Merritt—COLLIERY—Merritt Coal Mines, Ltd., Merritt, colliery **bldgs.**, coke mfg. plant. $50,000.

B. C., Trail—PLANT—Con. Mining & Smelting Co. of Canada, Ltd., Trail, rein.-con. plant exten. $80,000.

B. C., Vancouver—SAW MILL—Minto **Saw** Mills Ltd., 1014 Rogers Bldg., saw mill **and** allied plant construction. $40,000.

Man., Winnipeg — PLANT — Kildonan Canning Co. Ltd., 7 Jamieson Ave., reconstructing plant. Architect, c/o E. S. Stewart, 7 Jamieson Ave.

N. S., Port William—PLANT—Nova Scotia Apple Marketing Bd. Ltd., Kentville, 50x126 ft. apple dehydration plant. $40,000. With equip. $56,000.

N. S., Sydney—PLANT—Dominion Steel and Coal Corp., Ltd., Canada Cement Bldg., Montreal, Que., bids soon plant addns., electric overhead magnet crane and other equip. $200,000.

N. S., Truro—MINE BUILDINGS—Cobequid Mines Ltd., Truro, alterations mine bldgs., new construction, Five Islands and Economy Hill. $60,000.

★ **Ont., Cornwall**—**PLANT**—Courtaulds (Canada) Ltd., E. Front St., Cornwall in association with Dpt. Munitions & Supply, Ottawa, Ont., plant **addn.**, East Cornwall. $1,500,000-$2,000,000.

★ **Que., Rock Island**—**PLANT**—Union Twist Drill Co., Ltd., Rock Island, bids soon 3 story, 85x155 ft. plant exten. and 1 story, 40x85 ft. annex. $300,000, equip $650,000.

BIDS ASKED

Pa., Erie—**PLANT**—Erie Foundry Co., D. A. Currie, pres. and genl. mgr., 1253 W. 12 St., general contract, 1 story, 100x450 ft., brick, steel plant addn.

Wis., La Crosse—PLANT, etc.—Swift & Co., Stock Yard, Chicago, Ill., dehydrated milk plant, boiler house. A. M. Ives, c/o owner, engr. CD 6/23—ENR 6/25.

CONTRACTS AWARDED

Calif., Lynwood — **PLANT** — Western Gear Works, Alameda St. and Imperial Hy., assembly service and personnel bldgs., to Mac Isaac & Menke, 3440 E. 22 St., Los Angeles, over **$40,000.** J. H. Davies, Ocean Center Bldg., Long Beach, engr. **(Correction**—contractor.) CD 6/30—ENR 7/2, under CA.

Ill., Cicero—FACTORY—American Phenolic Corp., 1830 S. 54 Ave., remodeling, constructing 1 and 2 story, 80x310 ft. factory, to Campbell-Lowrie-Lautermilch Corp., 400 W. Madison St., Chicago. CD 5/26—ENR 5/28.

Ill., Rockford—FACTORY—Sundstrand Machine Tool Co., 2531 11 St., 1 story, 130x501 ft. and 2nd story sect. 60x80 ft. factory and office bldg., to Holm-Page Co., 2117 Kishwaukee St. G. A. Johnson, Swedish Amer. Bank Bldg., archt.

Mass., Provincetown — CANNING PLANT—Owner, c/o contractor, 1 story fish canning plant, brick, to Frank A. Days & Sons, 24 Pearl St.

Mich., Detroit—FACTORY—National Broach & Machine Co., 5600 St. Jean Ave., 1 story, brick, steel, rein.-con. factory bldg. for machine shop, plain fdn., to Bryant & Detwiler Co., 2304 Penobscot Bldg. Est. **$150,000.**

Miss., Natchez—PLANT—Armstrong Tire & Rubber Co., Natchez, plant, to Brice Building Co., Inc., 215 S. 18 St., Birmingham, Ala.

N. Y., Olean—PLANT—Clark Bros. Co., 600 Lincoln Ave., design and construction addnl. plant units, to H. K. Ferguson Co., Hanna Bldg., Cleveland, O. Est. over **$100,000.** CD 12/26—ENR 1/1.

O., Cleveland — ENGINEERING — Advance Die & Tool Co., R. Bredenbeck, 6800 Madison Ave., 2 story, 21x65 ft., brick, concrete engineering bldg., to Gillmore-Carmichael-Olson Co., 1873 E. 55 St. Est. **$40,000.** Awarded 6/25.

O., Cleveland—FACTORY—Art Galvanizing Works, W. L. Klein, pres., 3925 Valley Rd., 1 story, 50x65 ft., concrete block, wood factory, to Nicholls Building Co., 1175 Lakeview Rd. Est. **$40,000.** Awarded 6/25. CD 6/16—ENR 6/18, under BA.

Pa., Chester — BUS TERMINAL SHED — Philadelphia Transportation Co., 6 and Welsh Sts., bus terminal shelter shed, to T. A. Stoutenburg, 4510 N. 8 St., Phila.

Pa., Kane—PLANT—Speer Carbon Co., St. Marys, altering, imprv. constructing addns. Albertson Co. plant, separate contracts. Est. **$40,000** incl. equip. CD 6/10—ENR 6/25.

Pa., Phila.—PLANT—Atlantic Refining Co., 31 St. and Passyunk Ave., fdns. for refinery, to Lauter Constr. Co., Otis Bldg. CD 12/22—ENR 12/25.

Pa., Phila.—PLANT—I.T.E. Circuit Breaker Co., Hamilton St. between 18 and 19 Sts., altering, addn. 8 story bldg., to Smith & Buzly, 2020 Chancler St. CD 6/23—ENR 6/25.

Pa., Phila.—FOUNDRY—Fairmount Fdry., 3 and Westmoreland Sts., fdry., to Haverstick-Borthwick Co., 1814 Chestnut St., Ed. Schoeppe, 1602 Spruce St., archt. CD 6/17—ENR 6/25.

Pa., Phila. — WAREHOUSE — Light Corrugated Box Co., Decatur and Edmund Sts., warehouse, to P. Litman, 5331 Arlington St. I. W. Levin, 1531 Belmont Ave., archt.

R. I., Woonsocket—WAREHOUSE—Belmont Woolen Yarn Mills, 24 E. Mill St., 2 story, bsmnt., 62x141 ft., brick warehouse, to Brien Bldg. Co., Inc., 126 Clinton St. **$56,000.**

Wis., Berlin—PLANT—W. K. Parsons Products Co., Berlin, 1 and 2 story, part bsmnt., concrete block, frame plant addn., concrete fdn., to Geo Seaman, Berlin. J. F. Dreger, 188 Waugoo St., Oshkosh, archt.

Wis., Muskego—GRAIN ELEVATOR—Horn Bros., Muskego, rebuilding 44x120 ft., concrete block mill construction grain elevator, concrete fdn., to Ed. Ver Halen, Caledonia. J. Topzant, 424 E. Wells St., Milwaukee, archt.

B. C., North Vancouver—PLANT—Owner, plant exten., to W. Stewart Const. Co., Ltd., 615 W. Pender St., Vancouver. **$365,000.**

Ont., St. Catherine — BOILER SHOP — Foster Wheeler, Ltd., St. Catherine, boiler shop exten., etc., to Newman Bros., Ltd., 127 St. Paul St. Est. **$40,000.**

Ont., Toronto—**PLANT**—**Acme Ruler & Advertising Co., Ltd., 512 Rhodes Ave.,** reconstructing plant destroyed by fire, to Chestnut-McGregor, Ltd., 96 Bloor St., W., about **$45,000.** CD 6/16—ENR 6/18.

Ont., Toronto — ROUNDHOUSE — Canadian Pacific Ry. Co., T. B. Ballantyne, dist. engr., Ontario Dist., Union Station, 8 stall addn. roundhouse, Runnymede Rd. and Lambton Ave. to Bradford-Hoshal, 1170 Yonge St., about **$50,000.** CD 6/5.

Que., Lachine—**PLANT**—Dominion Engineering Works, Ltd., 1 Ave., Lachine, plant exten., to Hyde & Miller, Ltd., 1500 Guy St., Montreal. **$82,500.**

Sask., Moose Jaw—**PLANT**—British American Oil Co. Ltd., Royal Bank Bldg., Toronto, Ont., plant exten., day labor. **$100,000.** CD 6/23—ENR 6/25.

OFFICIAL PROPOSALS

Official notices of bids wanted on construction and related work, equipment and material for government, state, municipal departments and private enterprises

Bids: July 31 (980)

Repairing Pump

Proposals for furnishing materials and the performance of work on the Snow-Holly Pump of the Bureau of Water, City of Yonkers, New York, said Commissioner being hereafter referred to, will be received by the Commissioner of Public Works, City of Yonkers, New York, said Commissioner being authorized by Special Ordinance No. 120-1942, to procure the same without formal Contract through the Board of Contract and Supply. Said Proposals should be submitted to the Commissioner of Public Works and deposited with the Board of Contract and Supply, Room No. 113, City Hall, Yonkers, New York, on or before 2 P.M. Friday July 31st, 1942.

IN THE MATTER OF:—Furnishing and Delivering to the Bureau of Water, Department of Public Works, Tube Well Pumping Station, Saw Mill River Road, Yonkers, New York, in accordance with Special Ordinance No. 120-1942, the necessary labor, materials, shop work and field work for the Reconstruction and Improvements required for the ten (10) M.G.D. Snow-Holly Pump No. S 335 K - 1912 - 24x54x19½x86, as per specifications on file in the Office of the Engineer of Water Extension.

Copies of the proposed form of agreement and specifications may be obtained at the Office of the said Board of Contract and Supply.

CHRIS. J. SHERIDAN
Commissioner of Public Works
City of Yonkers

Bids: July 27 (981)

Water Diversion Tunnel

1. Sealed proposals will be received by the City of Norfolk, at the office of the Director of Public Works, Room 203, City Hall Building, Norfolk, Virginia, until 12 o'clock noon, July 27, 1942 and there publicly opened, and read immediately thereafter, for the construction of a water diversion tunnel between Lake Burnt Mills and Lake Prince.

2. Plans, specifications and contract documents will be open to public inspection at the office of the Director of Public Works, or may be obtained from the Director, at Room 203, City Hall, upon deposit of $25.00. The full amount of the deposit for each set of documents will be refunded upon the return of all plans and documents in good condition within ten days after the date of opening bid.

3. All bids must be accompanied by a certified check for five per cent (5%) or acceptable bidder's bond in the amount of six per cent (6%) of the total bid, and payable to B. Gray Tunstall, City Treasurer.

4. A performance bond equal to 100% of the contract price will be required of the successful bidder.

5. Bidders must be registered to do business in the State of Virginia and must furnish their State registration certificate number at the time of filing their bids, as required by chapter 175E of the Virginia Code.

6. No bid may be withdrawn after the scheduled closing time for the receipt of bids, for a period of thirty days.

7. The City reserves the right to reject any or all bids or to waive informalities.

8. The tunnel will be approximately 12,000 feet long with a cross-section of 33 square feet. The work will include four concrete-lined shafts; but the tunnel is expected to be in "blue marl" which will not need lining.

City of Norfolk, Virginia
By:
Walter H. Taylor III
Director of Public Works

EMPLOYMENT OPPORTUNITIES

RATE: 10 CENTS A WORD, MINIMUM CHARGE $2.00

Positions Wanted (full or part-time salaried employment only), ½ the above rates, payable in advance.

Box Numbers in care of any of our New York, Chicago or San Francisco offices count 10 words additional in undisplayed ads.

Discount of 10% if one payment is made in advance for four consecutive insertions of undisplayed ads (not including proposals).

Copy for new advertisements received until 10 A. M. Friday for Thursday's Issue

POSITIONS VACANT

These Positions Vacant advertisements are published subject to agreement by the advertisers not to consider applicants now employed on war work unless they obtain written release from present employer.

STRUCTURAL DETAILERS, accurate and fast workers for Mill buildings and Bridges. Steady work with plenty overtime. State experience and rate. Summer Engineering Co., 239 4th Ave., Pittsburgh, Pa.

WANTED PROJECT MANAGER, Superintendents and Foremen for a Tunnel Project in Old Mexico, mostly rock excavation and lined with concrete, Layout Field Engineers and Office Manager. Preference will be shown those speaking Spanish and with experience for General Contractors on similar work. P-879, Engineering News-Record, 330 W. 42nd St., New York, N. Y.

MECHANICAL ENGINEER—Caribbean Area. Must have experience in supervision of installation of Heavy Pumps, Pump House Equipt., Third Rail for cranes and Elec. Work on pump house. State age, experience, education and selective service status. P-882, Engineering News-Record, 330 W 42nd St., New York City, N. Y.

FIRE PROTECTION ENGINEER and Inspector. Permanent position open in Middle West with large industrial fire insurance organization. Previous knowledge in this work not necessary. Applicant must be a technical graduate with manufacturing or engineering experience, and possess a good personality. Several months' training with full pay will be given. Send photo with letter. P-883, Engineering News-Record, 330 W. 42nd St., New York, N. Y.

POSITIONS WANTED

CIVIL ENGINEER; Graduate; 33 years experience; design; construction; Industrial plants; Water supply; Hydro-electric developments. PW-843, Engineering News-Record, 330 W. 42nd St., New York, N. Y.

ASPHALT PAVING SUPERINTENDENT, 30 years experience. 56 years of age. PW-838, Engineering News-Record, 520 N. Michigan Ave., Chicago, Ill.

CHIEF ENGINEER, Chief Estimator; thirty years contracting experience; past two on large Army and Navy Projects. PW-855, Engineering News-Record, 330 W. 42nd St., New York, N. Y.

POSITIONS WANTED

CONSTRUCTION SUPERINTENDENT-ENGINEER. Wide experience engineering construction with contractors. Excavation, paving, reinforced concrete, sewers, disposal, waterworks, utility underground work, general construction. Experience Government inspection, supervision, checking of contracts. Competent knowledge of contracts and specifications. Know labor and equipment organization and handling. Graduate engineer, age 47. Available short notice. Consider short or long jobs. PW-808, Engineering News-Record, 520 N. Michigan Ave., Chicago, Ill.

EXECUTIVE ENGINEER, Graduate, registered in Michigan, 33 years experience in design and in field on both heavy construction and building work, last 2 years on Navy projects. 1½ years in Navy Civil Engineer Corps in last war. Desires position as project engineer in charge of design and field work. PW-853, Engineering News-Record, 330 W. 42nd St., New York, N. Y.

CHIEF ACCOUNTANT—Office and Personnel Manager. 48 years old, 20 years construction experience. Available at once, will travel. Experienced Defense Plant Corporation, Y & D, Army and Navy procedures. G. P. Rauscher, Box 96, Leetsdale, Pa.

CHIEF ACCOUNTING OFFICER, Former Government auditor, familiar with Appendix A, Certificates, and other Defense Plant Corporation procedure. Now Comptroller on construction project costing in excess of $5,000,000, winding up in two weeks. Not subject to draft. PW-864 Engineering News-Record, 520 N. Michigan Ave., Chicago, Ill.

INSTRUMENT AND LEVEL MAN, experience Highway, Airfield, Sewerage, Water Pollution, Survey extensive Building Construction. Programs. Understands First Aid. Office Machines, Const. Timekeeper. PW-868, Engineering News-Record, 330 W. 42nd St., New York, N. Y.

PROJECT MANAGER or Assistant—Civil Engineer 20 years Construction experience. Last 6 years as Executive in the organization of Projects of Industrial Plants and Paper Mills, etc. Just completed an assignment on large Industrial Defense Plant. Available immediately. Have following of key personnel. PW-885, Engineering News-Record, 330 W. 42nd St., New York, N. Y.

ELECTRICAL SUPERINTENDENT Construction—anywhere in States—American—Married. PW-866, Engineering News-Record, 68 Post Street, San Francisco, Cal.

POSITIONS WANTED

CIVIL ENGINEER twenty years experience in Steel Building Construction, Engineering and Production. Successfully filled jobs as Chief Draftsman, Chief Engineer and Manager for Structural Fabricators. College graduate. Licensed. Available shortly. PW-876, Engineering News-Record, 520 N. Michigan Ave., Chicago, Ill.

STRUCTURAL DESIGNER. Steel and reinforced concrete commercial and industrial buildings, power plants etc. Expert stress analyst. Up to date on both riveted and welded steel construction. Initiative, originality, practical engineering sense and an instinct for economical lay-out and design. Adaptable to aircraft or ship building. Small fabricating plant interested in developing patentable improvements in structural assemblies would be favorably regarded. PW-857, Engineering News-Record, 330 W. 42nd St., New York, N. Y.

PROJECT MANAGER—Construction Superintendent—25 years experience in all types of Building Construction. Just completed large Government project. Can thoroughly organize for quick results. Available after July 10, 1942. Best of references furnished. PW-880, Engineering News-Record, 330 W. 42nd St., New York, N. Y.

STRUCTURAL ENGINEER: 43, graduate, licensed, 20 years experience; estimating, design and construction; bridges, buildings, highways, parks, parkways, piers, bulkheads. Available for part time work; location, New York City. PW-881, Engineering News-Record, 330 W. 42nd St., New York, N. Y.

ENGINEER with proven executive ability and twenty years of sound experience in all phases of construction would like to hear from busy Contractors, Project Managers, or Consulting Engineers who are looking for someone to take over unlimited responsibilities. Apt-4-A, Riverview Manor, Harrisburg, Pa.

CONSTRUCTION ENGINEER—Estimator, 39 graduate desires permanent connection with major building construction company requiring services high grade man fully qualified by field and office experience to hold responsible position. PW-884, Engineering News-Record, 330 W. 42nd St., New York, N. Y.

GRADUATE CIVIL ENGINEER 29 years design and construction of Industrial plants, shipways commercial and municipal structures bridges, etc. Completed assignments as Designing Engineer and Project Engineer on large Industrial Defense Projects. Thoroughly familiar with Government procedure. Available about July 15th. PW-8[illegible]6, Engineering News-Record, 330 W. 42nd St., New York, N. Y.

Engineering
Library